

SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1916.

No. 3. Original.

THE PEOPLE OF THE STATE OF NEW YORK, COMPLAIN-
ANTS,

vs.

STATE OF NEW JERSEY AND PASSAIC VALLEY SEWER-
AGE COMMISSIONERS, DEFENDANTS.

VOLUME V.

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VOLUME V.

THE PEOPLE OF THE STATE OF NEW YORK, Complainants,

vs.

STATE OF NEW JERSEY and PASSAIC VALLEY SEWERAGE COMMISSIONERS, Defendants.

EXHIBITS

THE PEOPLE OF THE STATE OF NEW YORK,
COMPLAINANTS,

VS.

STATE OF NEW JERSEY ET AL.

COMPLAINANTS' EXHIBIT No. 99.

JAMES D. MAHER,
Commissioner.

RECEIVED
 DEPARTMENT
 OF
 HEALTH

WASTEWATER DISPOSAL METHODS - Dilution

New York Harbor Dissolved Oxygen in 1911 - Cross-Section

Averages for 10 Locations - 1062 Samples Taken, in 20 Days.

COMPILED BY SOH.

CONTINUED

PAGE NO.

205

AGE NO.

1H417

SHEET

TOT. IN GROUP

DATE

Jan. 17, 1912

MADE BY LABORATORY NO. 1272

LOCATION	DISSOLVED OXYGEN						Date	Reference
	BOTH CURRENTS		EBB CURRENT		FLOOD CURRENT			
	CC per Liter	% of Saturation	CC per Liter	% of Saturation	CC per Liter	% of Saturation		
HUDSON R. at Mr. St. Vrain	4.11	69	4.19	70	4.64	67	20 June 29	302 H 340 + 210
	3.68	76	3.82	80	4.80	72	20 Oct 13	" " 370 + 410
	4.60	73	4.77	78	4.42	70		
HUDSON R. at the Mouth	—	—	3.14	56	—	—	19 July 19	" " 344 + 393
	3.11	56	3.03	54	3.20	58	45 July 20	" " 346 + 394
	2.90	55	2.84	53	3.14	58	45 Aug 10	" " 350 + 398
	3.18	56	3.00	52	3.31	58	100 Sept 26	" " 359 + 392
	3.09	56	3.01	54	3.22	58		
EAST RIVER at Tunnel Neck	5.20	86	5.41	89	5.05	82	24 Oct 23	" " 378 + 416
EAST RIVER at Casenbury	5.72	67	4.24	77	5.10	56	20 Jan 30	" " 341 + 388
EAST RIVER at Lawrence Pt.	—	—	—	—	3.09	56	45 July 19	" " 343 + 397
	3.43	57	3.28	60	3.22	54	44 Oct 11	" " 346 + 396
	3.43	57	3.28	60	3.16	55		
EAST RIVER, AT THE MOUTH	3.61	58	2.90	53	3.12	57	45 July 27	" " 340 + 390
	3.64	56	3.03	54	3.16	57	45 Aug 3	" " 340 + 393
	3.68	54	2.95	52	3.21	57	90 Sept 29	" " 347 + 399
	3.04	55	2.93	53	3.16	57	100	
HILL VAN KULL, EAST END	4.42	75	4.41	74	4.45	76	24 Oct 4	" " 362 + 401
THE HARBORS AT FORTS	—	—	3.80	72	—	—	21 Aug 8	" " 351 + 390
	4.42	72	4.28	76	4.57	82	100 Sept 26	" " 356 + 394
	4.42	73	4.07	74	4.57	82		
UPPER BAY, IN VICINITY OF ROBBINS REEF	4.23	71	4.03	69	4.25	76	45 Oct 16	" " 348 + 412
	4.63	73	4.44	70	4.70	77	36 Oct 23	" " 352 + 413
	4.89	76	5.14	80	4.64	73	36 Oct 34	" " 376 + 418
	4.60	72	4.54	72	4.66	75	117	
NEWARK BAY, LOWER END	4.02	64	4.22	67	3.82	61	64 Oct 6	" " 366 + 404

Compliments: Ernest H. 98 - P. J. Francis, S. M. Major, Commissioner

SUBSIDIARY DISPOSAL METHODS- Dilution
 NEW YORK HARBOR- Dissolved Oxygen in 1911 HUDSON RIVER
 Average % of Saturation from Cross-Sections AT MT ST VINCENT
 COMPILED BY: W. C. M. A. CHECKED BY: _____ DATE: JULY 3 1912

Date of collection June 29 1911HW Gov. I. 10²³ AM LW Gov. I. 4¹² PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	all Depths	both Currents & all Depths
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	28	9.40 AM	67%	%	%	%
	29	10.10 "	67			
	29	10.40 "	67			
	32	11.20 "	72			
	35	11.55 "	72	69.0 (6 samples)		
<u>Mid-depth</u>	24	9.42 "	62			
	27	10.12 "	63			
	30	10.42 "	68			
	33	11.22 "	68			
	36	11.57 "	72	66.6 (6 samples)		
<u>Bottom</u>	25	9.45 "	62			
	28	10.15 "	63			
	31	10.45 "	68			
	34	11.25 "	68	(6 samples)	(6 samples)	
	37	12.00 PM	72	66.5	67.4	
<u>Ebb Current</u>						
<u>Depth 1 ft.</u>	38	3.20 PM	68			
	41	3.52 "	68			
	44	4.10 "	72			
	47	4.30 "	78			
	50	4.50 "	78	(6 samples)	72.7	
<u>Mid-depth</u>	39	3.28 "	68			
	42	3.53 "	68			
	45	4.12 "	78			
	48	4.32 "	72	(6 samples)	70.6	
	51	4.52 "	72			
<u>Bottom</u>	40	3.25 "	63			
	43	3.55 "	63			
	46	4.15 "	69			
	49	4.35 "	68	(6 samples)	(6 samples)	
	52	4.56 "	73	67.2	70.2	69%

L. A. P. R.

SUBJECT: DISPOSAL METHODS: Dilution

New York Harbor Dissolved Oxygen in 1941

HUDSON RIVER

PUB. NO. 20.8

ACC. NO. 1H 379

Average C.C. per liter - from 115 Sections. AT MT. ST. VINCENT

TOT. IN COPY

COMPILED BY: G. C. H.

CHECKED BY:

DATE

JAN. 10

1942

Date of Collection: June 29, 1941

HW (Gov. I) 10:30 AM

LW 4:30 PM

	Sample No	Time	Oxygen C.C. per liter	Averages C.C. per liter		
				Each Current	All Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	23	9:40 AM	4.05			
	26	10:10 "	4.05			
	29	10:40 "	4.05			
	32	11:20 "	4.35	(5 samples)		
	35	11:45 "	4.35	4.16		
<u>Mid-depth</u>	24	9:42 "	3.74			
	27	10:12 "	3.74			
	30	10:42 "	4.05			
	33	11:22 "	4.05	(5 samples)		
	36	11:57 "	4.35	3.98		
<u>Bottom</u>	25	9:45 "	3.74			
	28	10:15 "	3.74			
	31	10:45 "	4.05			
	34	11:25 "	4.05	(5 samples)	(5 samples)	
	37	12:00 M	4.35	3.98	4.04	
<u>Ebb Current</u>						
<u>Depth 1 ft.</u>	38	3:20 PM	4.05			
	41	3:52 "	4.05			
	44	4:10 "	4.35			
	47	4:30 "	4.68	(5 samples)		
	50	4:50 "	4.68	4.38		
<u>Mid-depth</u>	39	3:23 "	4.05			
	42	3:53 "	4.05			
	45	4:12 "	4.35			
	48	4:32 "	4.35	(5 samples)		
	51	4:52 "	4.35	4.22		
<u>Bottom</u>	40	3:25 "	3.74			
	43	3:55 "	3.74			
	46	4:15 "	4.05			
	49	4:36 "	4.05	(5 samples)	(5 samples)	
	52	4:56 "	4.35	3.98	4.19	4.11

ANALYST: DISPOSAL METHOD: Dilution
 NEW YORK: Hudson Disposal Agency in 1981
 ANALYST: Average % of Solubility from Core Section: ATMT. OF VINCENT
 ANALYST: 20.5
 ANALYST: 1984B
 ANALYST: 1 to 100 of
 ANALYST: Jan. 8 1982

Date of Collection Oct. 18 1981. LW 10:15 AM 1982 10:15 AM

	Sample No.	Time	% of Saturation	Average Percent of Saturation		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 ft</u>						
	1948	7:45 AM	84%			
	1951	7:53 "	85			
	1954	8:01 "	86			
	1957	8:09 "	88			
	1960	8:17 "	87			
	1963	8:48 "	84			
	1966	8:58 "	86			
	1969	10:01 "	87			
	1972	10:09 "	88			
	1975	10:17 "	87			
	2008	4:00 PM	73			
	2011	4:08 "	74			
	2019	4:16 "	77			
	2017	4:24 "	78			
	2070	4:32 "	79			
	2028	5:15 "	77			
	2034	5:23 "	78			
	2039	5:30 "	78			
	2032	5:36 "	79			
	2035	5:46 "	81			
				81.8%		

SUBJECT: DISPOSAL METHODS - DILUTION

PUG NO 20.5

NEWARK HARBOR Dissolved Oxygen in 1911 HUDSON RIVER

AND NO 1H570

Average % of Saturation from Cross Section AT MT. ST VINCENT

DATE 2' TO 4' 4

COMPILED BY G. H. H.

CHECKED BY

DATE Jan 9 - 1912

Date of Collection Oct. 13, 1911

1 W. Gov. I. L. HAN 1 W. S. HAN

	Sample No.	Time.	% of Saturation	Average % of Saturation		
				Each Current	All Current in	Both
				Each Depth	Depth	All Depth
Ebb Current Mid-depth	1949	7:43 AM	78 %			
	1952	7:55 -	79			
	1955	8:05 -	85			
	1958	8:11 -	85			
	1961	8:19 -	83			
	1964	8:47 -	78			
	1967	9:55 -	79			
	1970	10:03 -	84			
	1975	10:11 -	85			
	1976	10:19 -	86			
	2009	4:02 PM	74			
	2012	4:10 -	75			
	2015	4:18 -	78			
	2018	4:26 -	77			
	2021	4:34 -	78			
	2024	5:17 -	78			
	2027	5:25 -	79			
	2030	5:32 -	79			
	2033	5:40 -	81			
	2036	6:48 -	72			
				79.8 %		

G. H. H. P. S.

SUBJECT: DISPOSAL METHODS - Dredge
 ANALYSIS: Dissolved Oxygen in FILL HUDSON RIVER
 ANALYST: J. J. Sullivan, from Cross Section, AT Mt. St. Vincent
 DATE: Jan 9, 1951
 ANALYST: J. J. Sullivan
 DATE: Jan 9, 1951

Date of Collection, Oct. 13, 1951

LW 1:15 AM HW 1:15 AM

	Sample No.	Time	% of Substrate	Average Percent of Substrate		Both Current & All Depths
				Ebb Current		
				Each Depth	All Depths	
<u>Ebb Current</u>				(sample)		
<u>Depth 1 ft. see sheet 1</u>				81.8 %		
<u>the depth is about 2.</u>				(no sample)	79.0	
<u>Bottom</u>	1950	7:43 AM	78			
	1952	7:57 "	80			
	1956	8:05 "	83			
	1959	8:13 "	83			
	1962	8:21 "	83			
	1965	8:49 "	71			
	1968	9:57 "	79			
	1971	10:05 "	84			
	1974	10:13 "	85			
	1977	10:21 "	84			
	2010	4:04 PM	76			
	2013	4:12 "	75			
	2016	4:20 "	78			
	2019	4:28 "	77			
	2022	4:36 "	78			
	2025	4:39 "	75			
	2038	5:27 "	79			
	2031	5:34 "	79			
	2024	5:42 "	81			
	2087	5:50 "	82	(sample)	80.0	(sample) 80.5 %
<u>Flood Current, see sheet 4</u>						

Ca 99-96

Disposal Method: Dilution

Run No. 20.5

New Six-Hour Dissolved Oxygen in 1961

Mudon River Run No. 1M372

Average % of Saturation - from Green Sections

at Mt St Vincent Run 4 1st - Green 4

Collected by: E.A.H.

Checked by:

Date: Jan. 9 1962

Date of Collection: Oct 13, 1961

LW 9:15 AM HW 11:30 AM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Depth	At Depth	Both Currents - At Depth
<u>Flow Current</u> , one hour					60.5%	
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	1978	11:05 AM	74			
	1981	11:50 "	78			
	1979	11:01 PM	78			
	1997	11:09 "	76			
	1990	12:17 "	77			
	1998	2:00 "	74			
	1996	2:08 "	73			
	1999	2:10 "	74			
	2003	2:24 "	78			
	2005	2:32 "	76	74.7%		
<u>Mid-depth</u>	1979	11:41 AM	73			
	1982	11:58 "	73			
	1975	12:05 PM	74			
	1987	12:07 "	75			
	1991	12:09 "	76			
	1994	2:03 "	67			
	1997	2:10 "	68			
	2000	2:18 "	68			
	2003	2:26 "	69			
	2004	2:34 "	70	71.2%		
<u>Bottom</u>	1980	11:42 AM	72			
			Same as			
	2007	2:36 PM	70	71.2%	72.4%	76%

62 97 97

SUBJECT DISPOSAL METHODS: Dilution
 New York Harbor Dissolved Oxygen in 1911 HUDSON RIVER
 Average C.C. per liter from Cross Sections AT MT. ST. VINCENT
 SHEET 1 TOP IN CORP 1
 DATE Jan 15 1912
 COMPUTED BY ELLY CHECKED BY
 MADE & CORRECTED ON 10/17/11

Date of Collection: Oct. 13, 1911 LWIGov I 5¹⁵ AM HW 11³² AM.

	Sample No.	Time	Oxygen C.C. per Liter	Averages, C.C. per liter.		
				Each Current		Both Currents
				Each Depth	All Depths	All Depths
<u>Ebb Current</u>						
<u>Depth 1 FT.</u>						
	1948	7.45 AM	5.74			
	1951	7.55	5.83			
	1954	8.01	5.88			
	1957	8.03	5.97			
	1960	8.17	5.94			
	1963	9.45	5.74			
	1966	9.59	5.83			
	1969	10.01	5.88			
	1972	10.09	5.97			
	1976	10.17	5.94			
	2003	4.00 PM	4.78			
	2011	4.01	4.87			
	2014	4.16	5.04			
	2017	4.24	5.11			
	2020	4.32	5.22			
	2073	5.15	5.06			
	2016	5.23	5.14			
	2029	5.30	5.18			
	2032	5.38	5.26			
	2035	5.46	5.36	(no sample) 5.49		

C. 77-28

SUBJECT: DISPOSAL METHODS Dilution
 New York Harbor Dissolved Oxygen in 1911 HUDSON RIVER
 Average C.C. per Liter from Cross Sections ATMT. ST. WILKENT SHEET Z TOT. IN COMP 4
 COMPUTED BY: B.H.H. CHECKED BY: DATE Jan 15 1912
 MADE IN CONNECTION WITH:

Date of Collection: OCT. 13, 1911 LWG. I 5:30 AM HW II 3:20 AM.

	Sample No.	Time	Oxygen C.C. per Liter	Averages. C.C. per Liter		
				Each Current		Both Currents All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Mid depth</u>						
	1949	7.47 AM	5.19			
	1952	7.55 "	5.28			
	1956	8.03 "	5.60			
	1958	8.11 "	5.63			
	1961	8.19 "	5.65			
	1964	8.41 "	5.19			
	1967	9.56 "	5.28			
	1970	10.02 "	5.60			
	1973	10.11 "	5.68			
	1976	10.19 "	5.65			
	2009	4.02 PM	4.78			
	2012	4.10 "	4.87			
	2015	4.18 "	5.04			
	2018	4.26 "	5.00			
	2021	4.34 "	5.07			
	2024	5.17 "	5.06			
	2027	5.25 "	5.14			
	2030	5.37 "	5.18			
	2033	5.40 "	5.36			
	2036	5.48 "	<u>5.36</u>			
				(20 samples)	5.28	

E. J. 99-P 9

SUBJECT: DISPOSAL METHODS - Dilution
 NEW YORK HARBOR Dissolved Oxygen in 1911 HUDSON RIVER
 Average C.C. per Liter - from Cross-Sections AT MT. ST. VINCENT SHEET 3 TOT. IN COMP. 4
 COMPUTED BY: Watt CHECKED BY: DATE: JAN 15 1912

Date of Collection Oct. 13, 1911 LWG. T. 8⁰⁰ AM. HW 11³² AM.

	Sample No	Time	Oxygen C.C. per Liter	Averages. C.C. per Liter		
				Each Current		Both Currents - All Depths
				Each Depth	All Depth	
Ebb Current				(20 samples)		
Depth 1 Ft. see sheet 1				5.49		
Mid. depth see sheet 2				(40 samples)		
				5.28		
Bottom	1950	7:49 AM	5.19			
	1953	7:57 "	5.28			
	1956	8:05 "	5.60			
	1959	8:13 "	5.68			
	1962	8:21 "	5.85			
	1965	8:49 "	5.19			
	1967	9:57 "	5.23			
	1971	10:05 "	5.60			
	1974	10:13 "	5.68			
	1977	10:21 "	5.65			
	2010	4:04 PM	4.94			
	2013	4:12 "	4.87			
	2016	4:20 "	5.04			
	2019	4:28 "	5.00			
	2022	4:36 "	5.07			
	2025	5:19 "	5.06			
	2028	5:27 "	5.14			
	2031	5:34 "	5.18			
	2034	5:42 "	5.26	(20 samples)	(40 samples)	
	2037	5:50 "	5.36	5.29	5.35	

61 99 P. 10

SUBJECT DISPOSAL METHODS - Dilution

NEW YORK HARBOR - Dissolved Oxygen in 1911

HUDSON RIVER

FILE NO 20.5

ACC NO 1H410

Average C.C. per Liter from Cross Sections

AT MT. ST. VINCENT

SHEET 4 TOT. IN CORR 4

COMPUTED BY *Cell H.*

CHECKED BY

DATE Jun 15 1912

MADE IN CONNECTION WITH

Date of Collection. Oct. 13, 1911

LW Gov. I. 5:50 AM HW 11:37 AM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter.		
				Each Depth	All Depths	Both Currents + All Depths
<u>Ebb Current. see sheet 3</u>					(60 samples) 5.35	
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	1978	11:45 AM	4.94			
	1981	11:53 "	5.00			
	1984	12:01 PM	5.04			
	1987	12:09 "	5.11			
	1990	12:17 "	5.22			
	1998	2:00 "	4.78			
	1996	2:08 "	4.37			
	1999	2:16 "	4.90			
	2002	2:24 "	5.00	(10 samples)		
	2005	2:32 "	5.07	4.99		
<u>Mid-depth</u>	1979	11:47 AM	4.75			
	1982	11:55 "	4.87			
	1985	12:03 PM	4.90			
	1988	12:11 "	5.00			
	1991	12:19 "	5.07			
	1994	2:02 "	4.38			
	1997	2:10 "	4.44			
	2000	2:18 "	4.48			
	2003	2:26 "	4.55	(10 samples)		
	2006	2:34 "	4.64	4.71		
<u>Bottom</u>	1980	11:49 AM	4.73			
	2007	2:36 PM	4.64	4.71	4.80	5.08

Ex 99-P.11

SUBJECT: DISPOSAL METHODS: Dilution
 New York Harbor - Dissolved Oxygen in 1911
 Average % of Saturation - from Cross Section MOUTh OF HUDSON RIVER
 COMPUTED BY: GAH CHECKED BY: _____
 FILE NO: 20.5 ACC NO: 1H344
 SHEET: 101 IN COMP DATE: Jan 3 1912

Date of Collection July 19, 1911

LW Gov. I. 7:27 AM HW Gov. I. 1:40 PM.

	Sample No.	Time.	% of Saturation	Averages Percent of Saturation		
				Each Current	Both Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Ebb Current</u>						
<u>Depth 1 Ft.</u>	463	9.15 AM	55%			
	466	9.30 "	55			
	469	9.45 "	55			
	472	10.00 "	55			
	475	10.15 "	55	(5 samples)	55.6%	
<u>Mid-depth</u>	464	9.16 "	53			
	467	9.31 "	53			
	470	9.46 "	53			
	473	10.01 "	53			
	476	10.16 "	53	(5 samples)	56.4	
<u>Bottoms</u>	465	9.18 "	53			
	468	9.33 "	55			
	471	9.48 "	55			
	474	10.03 "	55	(5 samples)	56.4	(5 samples)
	477	10.18 "	55			56.1%
<u>Flood Current</u>	no samples taken					

Cp 97-P 12

SUBJECT: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C.C. per Liter. from Gross Sections

FILE NO. 20.5
 ACC. NO. 1H383
 SHEET 101 in Comp
 DATE Jan. 11 1912

COMPUTED BY W.H.H.
 CHECKED BY _____
 MADE IN CONFORMANCE WITH _____

Date of Collection, July 19 1911LWGW. I. 7²⁷ AM HW 1²³ PM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		Bottle Currents. All depths
				Each Current - Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 Ft.</u>						
	463	9.15 AM	3.09			
	466	9.30 "	3.09			
	463	9.45 "	3.24			
	472	10.00 "	3.09	(5 samples)		
	475	10.15 "	<u>3.00</u>	3.12		
<u>Mid-depth</u>						
	464	9.16 "	2.95			
	467	9.31 "	3.09			
	470	9.46 "	3.24			
	473	10.01 "	3.24	(5 samples)		
	476	10.16 "	<u>3.24</u>	3.15		
<u>Bottom</u>						
	465	9.18 "	2.95			
	468	9.33 "	3.09			
	471	9.48 "	3.24			
	474	10.03 "	3.24	(5 samples)	(5 samples)	
	477	10.18 "	<u>3.24</u>	3.15	3.14	
<u>Flood Current. no samples taken.</u>						

Ex. 97 P. 13

SUBJECT DISPOSAL METHODS Dilution
 New York Harbor Dissolved Oxygen in 1911 MOUTH OF
 Average % of Saturation - from Cross Sections HUDSON RIVER
 COMPUTED BY GAH. CHECKED BY _____ DATE Jan 3, 1912
 FILE NO 205 ACC NO 1H345 SHEET 1 TOT. IN CASE 2

Date of Collection July 20 1911

LW Gov. I. 8:27 AM HW Gov. I. 2:58 PM.

	Sample No.	Time	% of Saturation	Averages Percent of Saturation	
				Each Current	Both + Currents - All Depths
<u>Ebb Current</u>					
<u>Depth 1 Ft.</u>					
	478	9:15 AM	53%		
	481	9:23 "	54		
	484	9:33 "	54		
	487	9:40 "	56	(samples)	
	490	9:46 "	<u>53</u>	54.4%	
<u>Mid depth</u>					
	479	9:16 "	53		
	482	9:24 "	54		
	485	9:34 "	54		
	488	9:41 "	56	(samples)	
	491	9:47 "	<u>55</u>	54.4	
<u>Bottom</u>					
	480	9:18 "	53		
	483	9:26 "	54		
	486	9:36 "	54		
	489	9:43 "	56	(samples)	
	492	9:48 "	<u>53</u>	<u>54.4</u>	54.4%
<u>Flood Current, see sheet 2</u>					

Ca 99-P. 14

BUREAU OF DISPOSAL METHODS - Division

NEWARK HARBOR Dissolved Oxygen in P.M.

MOUTH OF

Average % of Saturation - from Cross Sections HUDSON RIVER

FILE NO. 205

ACC. NO. 1H346

SHEET 2 Tot. in COOP. 2

COMPUTED BY L.A.H.

CHECKED BY

DATE Jan. 3, 1913

Date of Collection: July 20 1911LW Gov. I 8²⁷ AMHW Gov. I 2⁵³ PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Ebb Current. See sheet 1</u>					54.4% (12 samples)	
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	493	12:15 PM	56%			
	496	12:23 "	57			
	499	12:31 "	57			
	502	12:39 "	59			
	505	12:47 "	57			
	508	2:15 "	59			
	511	2:22 "	59			
	514	2:30 "	59			
	517	2:38 "	59	(12 samples)		
	520	2:46 "	57	57.9%		
<u>Mid-depth</u>	494	12:16 "	56			
	497	12:24 "	57			
	500	12:32 "	57			
	503	12:40 "	58			
	506	12:48 "	57			
	509	2:16 "	59			
	512	2:23 "	60			
	515	2:31 "	60			
	518	2:39 "	59	(12 samples)		
	521	2:47 "	58	58.1		
<u>Bottom</u>	495	12:18 "	56			
	498	12:26 "	57			
	501	12:34 "	57			
	504	12:42 "	58			
	507	12:50 "	57			
	510	2:18 "	59			
	513	2:25 "	60			
	516	2:33 "	60			
	519	2:41 "	59	(12 samples)	(12 samples)	(12 samples)
	522	2:49 "	58	58.1	58.0	56%

F. J. P. 15

DISPOSAL METHOD Dilution FILE NO. 205
 New York Harbor Dissolved Oxygen in 1911 ACC NO. 11584
 Average CC per Liter from Cross Sections MOUTH OF HUDSON RIVER DATE Jan. 11 1912
 COMPILED BY W. H. C. CHECKED BY _____

Dates of collection July 20 1911 LWG I 8²⁷ AM HW 2⁵⁸ PM

	Sample No.	Time	Oxygen CC per Liter	Averages CC per Liter		Both Currents & All depths
				Each Current	All depths	
<u>Ebb Current</u>						
<u>Depth 1 ft</u>	473	9:10 AM	295			
	481	9:23 "	300			
	484	9:33 "	301			
	487	9:40 "	310	(1 sample)		
	490	9:46 "	303	302		
<u>Mid depth</u>	475	9:16 "	292			
	491	9:47 "	303	(1 sample)	302	
<u>Bottom</u>	480	9:18 "	295			
	492	9:48 "	303	(1 sample)	(1 sample)	302
<u>Flood Current</u>						
<u>Depth 1 ft</u>	493	12:15 PM	309			
	496	12:23 "	314			
	499	12:31 "	315			
	502	12:39 "	314			
	505	12:47 "	317			
	508	2:15 "	314			
	511	2:22 "	319			
	516	2:30 "	319			
	517	2:35 "	324	(1 sample)		
	520	2:46 "	317	320		
<u>Mid depth</u>	494	12:16 "	309			
	521	2:41 "	317	(1 sample)	320	
<u>Bottom</u>	495	12:17 "	309			
	522	2:49 "	317	(1 sample)	(1 sample)	317

L. 99 P. 16

SUBJECT: DISPOSAL METHODS Dilution

FILE NO. 208

NEW YORK HARBOR Dissolved Oxygen in 1911

MOUTH OF

ACC. NO. IN 552.

Average % of Saturation from Cross Sections

HUDSON RIVER

TOT. IN COR. 2.

COMPUTED BY B. L. H.

CHECKED BY

DATE

Jan 4 1912.

MADE IN CONNECTION WITH

Date of Collection Aug. 10, 1911

HWGT. 8:30 AM LW 2:21 PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	All Depth	Both Currents All Depths
<u>Flood Current</u> <u>Depth 1 ft.</u>	903	9:10 AM	54%			
	903	9:17 "	56			
	905	9:24 "	57			
	917	9:30 "	58	(5 samples)		
	915	9:37 "	58	56.0%		
<u>Mid depth</u>	904	9:11 "	57			
	907	9:18 "	58			
	910	9:25 "	59			
	913	9:31 "	60	(5 samples)		
	916	9:38 "	58	58.4		
<u>Bottom</u>	906	9:13 "	57			
	909	9:20 "	58			
	911	9:27 "	59			
	914	9:33 "	60	(5 samples)	(5 samples)	
	917	9:40 "	57	58.4	57.6%	
<u>Ebb Current, see sheet 2</u>						

Co. PP-P. 17

ANALYSIS: DISPOSAL METHODS - Dilution
 REACTION: BARBAR Disposal Oxygen in 1911 MOUTH OF
 Average % of Saturation: Bar. Cross Sections HUDSON RIVER River 2
 Date: Jan 4 1911

Date of Collection Aug 10 1911 HWG 8⁰⁰ AM LW G 1 2⁰⁷ PM

	Sample No.	Time	% of Saturation	Average Percent of Saturation		
				Each Depth	All Depths	Both Surfaces & All Depths
<u>Flood Current</u> <u>see sheet 1</u>					57.6% (11 samples)	
<u>Ebb Current</u>						
<u>Dark shift</u>	918	11:00 AM	49%			
	921	11:17 "	53			
	924	11:34 "	54			
	927	11:50 "	53			
	930	12:07 "	50			
	933	12:24 PM	48			
	936	12:41 "	50			
	939	12:58 "	51			
	942	1:15 "	50	(sample)		
	945	1:32 "	47	50.5%		
<u>Mid-depth</u>	919	11:11 AM	51			
	922	11:28 "	53			
	925	11:45 "	54			
	928	12:02 "	55			
	931	12:19 "	53			
	934	12:36 PM	51			
	937	12:53 "	50			
	940	1:10 "	54			
	943	1:27 "	53	(sample)		
	946	1:44 "	50	52.5%		
<u>Bottom</u>	920	11:15 AM	51			
	923	11:32 "	53			
	926	11:49 "	54			
	929	12:06 "	55			
	932	12:23 "	53			
	935	12:40 PM	51			
	938	12:57 "	53			
	941	1:14 "	54			
	944	1:31 "	52	(sample)	(sample)	(sample)
	947	1:48 "	50	52.5%	51.0%	55%

6-19-11

Water Disposal Methods-Dilution

P-13 No. 205

New York Harbor Dissolved Oxygen in 1911

ACC. No. 1N390

Average CC per Liter from Cross-Sections

MOUTH OF
HUDSON RIVER

Sheet 1 of 2

Copyrighted by C. A. M.

Copyrighted by

Date Jan 11 1911

MADE IN GREAT BRITAIN

Date of Collection Aug. 10, 1911

New York Harbor 1N390

	Sample No.	Time	Oxygen CC per Liter	Averages C.C. per Liter		
				Each Current		Both Currents in All Depths
				Each Depth	All 100 fms	
<u>Flood Current</u> <u>Depth 1 ft</u>	903	9:14 AM	3.31			
	906	9:17 "	3.45			
	909	9:24 "	3.49			
	912	9:30 "	3.16	(Sample)		
	915	9:37 "	3.61	3.05		
<u>Mid-depth</u>	904	9:14 AM	3.10			
	907	9:18 "	3.17			
	910	9:25 "	3.24			
	913	9:31 "	3.58	(Sample)		
	916	9:38 "	3.15	3.19		
<u>Bottom</u>	905	9:15 "	3.10			
	908	9:20 "	3.17			
	911	9:27 "	3.24			
	914	9:33 "	3.22	(Sample)	(Sample)	
	917	9:40 "	3.15	3.15	3.12	

Ebb Current see sheet 2

C. A. M.

ANALYST: DISPOSAL METHODS - Dilution
 NEW YORK HANSON Disinfecting Capsules in 1911
 Average CC per Liter - from these Sections: MOUTH OF HUDSON RIVER
 CAPTURED BY: GAN DATE: Jan. 11 1911
 ANALYST: GAN DATE: Jan. 11 1911

Date of Collection Aug. 10, 1911

New York I 11:30 AM LW 2:30 PM

	Sample No	Time	Oxygen CC per Liter	Averages C.C. per Liter		
				Each Current Depth	All Current Depths	Both Current & All Depths
<u>Fixed Current</u> see sheet 1					3.14	
<u>Fixed Current</u> <u>Depth 1 ft.</u>	910	11:30 AM	2.70			
	911	11:45 "	2.80			
	914	11:54 "	2.95			
	917	11:56 "	2.86			
	920	11:57 "	2.74			
	922	12:00 PM	2.70			
	926	12:17 "	2.76			
	929	12:44 "	2.80			
	942	1:00 "	2.72			
	945	1:07 "	2.60			
				2.77		
<u>Mid-depth</u>	919	11:41 AM	2.81			
	923	11:48 "	2.80			
	925	11:49 "	2.83			
	928	11:51 "	3.00			
	931	11:55 "	2.88			
	934	12:01 PM	2.81			
	937	12:02 "	2.90			
	940	1:00 "	2.83			
	943	1:01 "	2.86			
	946	1:08 "	2.74			
				2.86		
<u>Bottom</u>	950	11:13 AM	2.81			
	947	2:00 PM	2.74	2.88	2.84	2.22

L. S. 11 1911

SPECIAL DISPOSAL METHODS: Diffusion

New York Harbor Dissolved Oxygen in 1961

Average % of Saturation from Cross Sections

COMPILED BY: G.H.N.

CHECKED BY:

FILE NO. 205

DATE: 11/3/57

Sheet 1 of 3

DATE: Jan 5

10-1

Date of Collection: Sept 28, 1961

LW 6:10 AM HW 12:00 PM LW 6:00 PM

	Sample No.	Time	. % of Saturation	Averages Percent of Saturation		
				Each Current		Both Currents at All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>						
	1579	6:30 AM	51%			
	1580	6:33 "	50			
	1583	6:48 "	50			
	1588	6:57 "	50			
	1591	7:06 "	50			
	1594	7:36 "	47			
	1597	7:39 "	50			
	1600	8:48 "	50			
	1603	8:57 "	51			
	1606	9:04 "	50			
	1609	4:30 PM	53			
	1617	4:39 "	54			
	1640	4:48 "	54			
	1643	4:57 "	55			
	1646	5:06 "	55			
	1649	6:00 "	47			
	1673	6:09 "	48			
	1675	6:13 "	50			
	1678	6:30 "	53			
	1681	6:37 "	51			
				(No Sampled)	518%	

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JAN 5 1912

SUBJECT: DISPOSAL METHODS Dilution
NEW YORK HARBOR Dissolved Oxygen in 1911

MOUTH OF

HUDSON RIVER

FILE NO. 205

ACC. NO. 1H358

SHEET 2 TOT. IN COMP. 3

COMPUTED BY G. A. H.

CHECKED BY

DATE Jan 5 1912

MADE IN CONNECTION WITH

Date of Collection Sept 28, 1911

LWGAY I 6⁰⁰ AM HW 12¹⁰ PM LW 6⁰⁰ PM

	Sample No.	Time	% of Saturation	Average Percent of Saturation		
				Each Current Depth	All Depths	Both Currents & All Depths
<u>Ebb Current</u>				(60 samples)		
<u>Depth 1 Ft see sheet 1</u>				51.8%		
<u>Mid depth</u>						
	1580	6 32 AM	52 %			
	1583	6 41 "	54			
	1586	6 5 "	55			
	1589	6 59 "	54			
	1592	7 08 "	55			
	1595	8 32 "	51			
	1598	8 41 "	51			
	1601	8 50 "	52			
	1604	8 59 "	54			
	1607	9 08 "	53			
	1655	4 32 PM	56			
	1658	4 41 "	57			
	1661	4 50 "	58			
	166	4 59 "	59			
	1667	5 08 "	56			
	1670	6 01 "	51			
	1673	6 07 "	52			
	1676	6 14 "	52			
	1679	6 21 "	53	(60 samples)		
	1682	6 28 "	53	53.9		
<u>Bottom</u>						
	1581	6 34 AM	52			
			Same as Mid depth			
	1683	6 30 PM	53	(60 samples) 53.9	(60 samples) 53.2 %	
				6.99	P 22	

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SUBJECT DISPOSAL METHODS - Dilution
NEW YORK HARBOR - Dissolved Oxygen in 1911

Average % of Saturation - from Cross-Sections

MOUTH OF HUDSON RIVER

FILE NO 205

ACC. NO. 1H359

SHEET 3 TOT IN COMP 3

COMPUTED BY

East

CHECKED BY

DATE Jan. 5 1912

MADE IN COMMISSION 10775

Date of Collection Sept 28, 1911

LW Gov I 6⁰⁷ AM HW 12¹³ PM LW 6⁰⁷ PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		Both Currents - All Depths
				Each Depth	All Depths	
				Percent of Saturation		
<u>Ebb Current see sheet 2</u>					53.2 % (6 samples)	
<u>Flood Current</u>						
<u>Depth 1 Ft.</u>						
	1609	10 30 AM	50 %			
	1612	10 39 "	53			
	1615	10 48 "	55			
	1618	10 57 "	56			
	1621	11 06 "	53			
	1624	12 30 PM	55			
	1627	12 39 "	55			
	1630	12 48 "	57			
	1633	12 57 "	57			
	1636	1 06 "	55			
	1639	2 30 "	58			
	1642	2 39 "	59			
	1645	2 48 "	60			
	1648	2 57 "	61	(5 samples)		
	1651	3 06 "	60	56.3 %		
<u>Mid-depth</u>						
	1610	10 37 AM	53			
	1613	10 41 "	54			
	1616	10 50 "	55			
	1619	10 59 "	57			
	1622	11 08 "	55			
	1625	12 32 PM	57			
	1628	12 41 "	59			
	1631	12 50 "	60			
	1634	12 59 "	61			
	1637	1 08 "	58			
	1640	2 32 "	60			
	1643	2 41 "	62			
	1646	2 50 "	63			
	1649	2 59 "	64	(5 samples)		
	1652	3 08 "	61	58.6		
<u>Bottom</u>						
	1611	10 34 AM	53			
	Same as Mid-Depth	(15 samples)	(15 samples)	(15 samples)
	1653	3 10 PM	61	58.6	57.8	56 %
				E & V 23		

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NEW YORK

SUBJECT: DISPOSAL METHOD - Dilution

NEW YORK HARBOR - Dissolved Oxygen in 1911

Average C C per Liter - From Cross Sections

COMPUTED BY: EGN

CHECKED BY:

SAID IN CONNECTION WITH

FILE NO. 205

ACC NO. 11395

SHEET 1 Tot in Comp. 3

DATE JAN. 12 1912

MOUTH OF
HUDSON RIVERDate of Collection Sept. 28, 1911LWGOVT 6⁰⁷AM HWIX 12PM LWGO7PM

	Sample No	Time	Oxygen CC per Liter	Averages. CC per Liter		
				Each Current		Both
				Each Depth	All Depths	Currents & All Depths
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>						
	1579	6 30 AM	3.01			
	1582	6 39 "	3.05			
	1585	6 48 "	3.19			
	1588	6 57 "	3.13			
	1591	7 06 "	3.06			
	1594	8 30 "	2.73			
	1597	8 39 "	2.84			
	1600	8 4 "	3.04			
	1603	8 37 "	3.00			
	1606	9 06 "	2.32			
	1654	4 30 PM	3.01			
	1657	4 39 "	3.08			
	1660	4 48 "	3.12			
	1663	4 57 "	3.19			
	1666	5 06 "	3.06			
	1669	6 00 "	2.73			
	1672	6 06 "	2.80			
	1675	6 13 "	3.00			
	1678	6 20 "	3.04			
	1681	6 27 "	<u>2.82</u>			
				(Resampling)	3.00	
				17 99	2 24	

SUBJECT: DISPOSAL METHODS Dilution

FILE NO 205

NEW YORK HARBOR Dissolved Oxygen in 1911

ACC NO 1H396

Average C C per Liter - from Cross Sections MOUTH OF HUDSON RIVER

SHEET 2 TOT IN GROUP 3

COMPUTED BY GAN

CHECKED BY

DATE Jan 12 1912

SEE IN CONNECTION WITH

Date of Collection, Sept 28 1911 LW 6:07 AM HW 12:13 PM LW 6:07 PM

	Sample No.	Time	Oxygen C C per Liter	Averages C C per Liter		
				Each Current Each Depth	All Currents All Depths	Both Currents All Depths
<u>Ebb Current</u>				(10 samples)		
<u>Depth 1 Ft</u>				3.00		
<u>Mid-depth</u>	1580	6:31 AM	3.01			
	1583	6:41 "	3.08			
	1586	6:50 "	3.19			
	1589	6:59 "	3.12			
	1592	7:08 "	3.19			
	1595	7:32 "	2.92			
	1598	8:41 "	2.94			
	1601	8:50 "	3.04			
	1604	8:59 "	3.12			
	1607	3:08 "	3.06			
	1653	4:31 PM	3.14			
	1658	4:41 "	3.22			
	1661	4:59 "	3.27			
	1664	4:58 "	3.33			
	1667	5:08 "	2.19			
	1670	6:01 "	2.92			
	1673	6:07 "	2.94			
	1676	6:14 "	3.00			
	1679	6:21 "	3.04	(10 samples)		
	1682	6:28 "	3.06	3.09		
<u>Bottom</u>	1581	6:34 AM	3.01			
			Same as			
			Mid-depth	(10 samples)	(6 samples)	
	1683	6:30 PM	3.06	3.09	3.06	

68 99 P 25

RECORDED
 INDEXED
 BY
 NEW YORK

 SUBJECT DISPOSAL METHODS - Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C.C. per Liter. From Cross-Sections

 MOUTH OF
 HUDSON RIVER

 FILE NO. 205
 ACC. NO. 11897

SHEET 3 TOT. IN COMP. 3

COMPUTED BY ELLH.

CHECKED BY

DATE JUN 12 1912

BASED ON COLLECTION WITH

Date of Collection Sept 28 1911

LW 6⁰⁰ AM HW 12⁰⁰ PM LW 6⁰⁰ PM

	Sample No	Time	Oxygen CC per Liter	Averages C C per Liter		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Ebb Current</u> gas sheet 2					3.06 (60 samples)	
<u>Flood Current</u> <u>Depth 1 Ft</u>	1609	10 50 AM	2.87			
	1612	10 30 "	3.07			
	1615	10 48 "	3.19			
	1618	10 57 "	3.27			
	1621	11 06 "	3.06			
	1624	10 30 PM	3.14			
	1627	12 39 "	3.19			
	1630	12 46 "	3.27			
	1633	12 57 "	3.33			
	1636	1 06 "	3.19			
	1639	2 30 "	3.28			
	1642	2 39 "	3.26			
	1645	2 48 "	3.41			
	1648	2 57 "	3.40	(10 samples)		
	1651	3 06 "	3.47	3.24		
<u>Mid-depth</u>	1610	10 33 AM	3.01			
	1613	10 41 "	3.08			
	1616	10 50 "	3.19			
	1619	10 59 "	3.27			
	1622	11 08 "	3.19			
	1625	12 52 PM	3.28			
	1628	12 41 "	3.26			
	1631	12 50 "	3.41			
	1634	12 59 "	3.48			
	1637	1 08 "	3.33			
	1640	2 32 "	3.47			
	1643	2 41 "	3.50			
	1646	2 50 "	3.55			
	1649	2 59 "	3.62	(10 samples)		
	1652	3 08 "	3.47	3.24		
<u>Bottom</u>	1611	10 04 AM	3.01			
	1653	3 10 PM	3.47	3.24	3.31	3.18

(v 99 P. 26)

SUBJECT: DISPOSAL METHODS - Dilution

NEWARK HARBOR Dissolved Oxygen in 1911

EAST RIVER

FILE NO. 20.5

ACC. NO. 1H378

Average % of Saturation - from Cross Sections, AT THROGGS NECK

SHEET 2 Tot. in Comp. 2

COMPUTED BY

L.H.H.

CHECKED BY

DATE

Jan 10, 1912.

1912.

Date of Collection, Oct 25 1911

HW Govt 9³² AM.

	Sample No	Time	% of Saturation	Average Percent of Saturation		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
Flood Current (W → E)	see sheet 1				(27 samples) 82.3%	
Ebb Current (W ← E)						
Depth 1 Ft	2182	9:30 AM	81%			
	2185	9:42 "	73			
	2188	9:55 "	80			
	2191	11:30 "	88			
	2194	11:42 "	90			
	2197	11:55 "	91			
	2200	1:30 PM	98			
	2203	1:42 "	99	(9 samples)		
	2206	1:55 "	90	86.2%		
Mid depth	2183	9:52 AM	87			
	2186	9:44 "	88			
	2189	9:57 "	89			
	2192	11:32 "	88			
	2195	11:44 "	90			
	2198	11:57 "	91			
	2201	1:32 PM	91			
	2204	1:44 "	93	(9 samples)		
	2207	1:37 "	94	90.1		
Bottom	2194	9:35 AM	87			
			same as			
			Mid depth	(9 samples)	(27 samples)	(25 samples)
	2208	1:00 PM	94	90.1	88.8	86.4%

SUBJECT DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C. C. per Liter. from Cross-Sections
 COMPUTED BY G. L. H. CHECKED BY _____ DATE Jan 16, 1913.

FILE NO. 205
 ACC. NO. 1H415
 SHEET 1 Tot. in Cont. 2.
EAST RIVER
AT THROGGNECK

Date of Collection Oct 25 1911 HW Gw I 9²²AM.

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Depth	All Depths	Both Currents & All Depths
<u>Flood Current (W ← E)</u> <u>Depth 1 Ft.</u>	2178	730AM	4.98			
	2176	742 "	4.44			
	2179	755 "	4.48			
	2209	330PM	5.19			
	2212	343 "	5.28			
	2218	355 "	5.32			
	2219	5.00 "	4.65			
	2221	512 "	4.71	(8 samples)		
	2224	525 "	4.76	5.80		
<u>Mid-depth</u>	2174	732AM	4.94			
	2177	744 "	5.00			
	2180	757 "	5.04			
	2210	332PM	5.10			
	2213	345 "	5.29			
	2216	357 "	5.32			
	2219	5.02 "	5.19			
	2222	514 "	5.10	(8 samples)		
	2225	527 "	5.22	5.17		
<u>Bottom</u>	2175	705AM	4.94			
			Same as Mid-depth	(8 samples)	(27 samples)	
	2226	530PM	5.32	5.17	5.05	
<u>Ebb Current (W ← E)</u>	<u>see sheet 2.</u>					

SUBJECT: DISPOSAL METHODS: Dilution
 New York Harbor: Dissolved Oxygen in 1911 EAST RIVER
 Average % of Saturation - from Cross Sections AT CLASON PT.
 COMPILED BY: B.A.H. CHECKED BY: _____
 FILE NO: 205
 ACC NO: 1H341
 DATE: Jan 3 1912

Date of Collection: June 30, 1911

HW Gage I 1:23 AM LW Gage I 3:27 PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	All Currents	Both Currents
				Depth	Depth	At Depth
<u>Flood Current (We → E)</u>						
<u>Depth 1 ft</u>	53	11:00 AM	60%			
	56	11:17 "	60			
	59	11:46 "	55			
	62	12:00 PM	55	(sampled)		
	65	12:16 "	55		52.0%	
<u>Mid-depth</u>	54	11:03 AM	58			
	57	11:17 "	58			
	60	11:48 "	58			
	63	12:03 PM	55	(sampled)		
	66	12:18 "	58		56.8	
<u>Bottom</u>	55	11:04 AM	58			
	58	11:30 "	55			
	61	11:50 "	58			
	64	12:10 PM	55	(sampled)		
	67	12:30 "	58		55.6	56.5%
<u>Ebb Current (We ← E)</u>						
<u>Depth 1 ft</u>	77	2:00 PM	79			
	80	2:30 "	79			
	83	2:57 "	79			
	86	3:16 "	79	(sampled)		
	89	3:18 "	79		79.0	
<u>Mid-depth</u>	78	2:22 "	79			
	81	2:41 "	79			
	84	2:50 "	79			
	87	3:10 "	79	(sampled)		
	90	3:37 "	79		79.0	
<u>Bottom</u>	79	2:14 "	74			
	82	2:43 "	74			
	85	3:01 "	74			
	88	3:20 "	74	(sampled)		
	91	3:40 "	74		74.0	77.3
						67%
						6.2, 6.4 P 20

OBJECT: DISPOSAL METHOD: Dilution
 New York Harbor Dissolved Oxygen in PM EAST RIVER FILE NO. 205
 Average % of Saturation from Cross Section AT THROGS NECK ACC. NO. 1H377
 COMPUTER BY Leff CHECKED BY DATE Jan 10 1922

Date of Collection, Oct 25 1911NW Gao I 9⁰⁰ AM

	Sample No	Time	% of Saturation	Average % Per cent of Saturation		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Flood Current (W → E)</u>						
<u>Depth 1 Ft.</u>	2173	730 AM	71			
	2176	742 "	72			
	2179	755 "	72			
	2183	820 PM	85			
	2212	345 "	87			
	2215	355 "	87			
	2218	408 "	76			
	2221	512 "	78	(from plus)		
	2224	525 "	76	78.4%		
<u>Mid-depth</u>	2174	732 AM	79			
	2177	744 "	80			
	2180	757 "	81			
	2210	322 PM	85			
	2213	345 "	87			
	2216	357 "	87			
	2219	502 "	85			
	2222	514 "	87	(from plus)		
	2225	527 "	87	84.2		
<u>Bottom</u>	2175	732 AM	78			
			(same as 5 ft depth)			
	2226	535 PM	87	84.2	82.3%	
<u>Ebb Current (W ← E)</u>	<u>See Sheet 2</u>					

6 44 P. 21

ANALYST: DISTRICT MEASUREMENTS - Division

NUMBER OF SAMPLES: Dissolved Oxygen in the EAST RIVER

ANALYST: J. J. Schellman - from Coast Section: ALABAMA

DATE: July 10, 1911

PAGE NO. 205

NO. 18345

DATE: 1 to station 2

DATE: Jan 3 1912

Date of Collection: July 10, 1911

1st day 1 7:17 AM 2nd day 2 12:57 PM

	Sample No.	Time	% of Saturation	Average Percent of Saturation		
				Each Current		Depth of All Depths
				Each Depth	All Depths	
Flood Current Depth 1 ft	416	10:00 AM	90 %			
	417	10:05 "	88			
	418	10:10 "	86			
	419	10:15 "	84			
	420	10:20 "	82			
	421	10:25 PM	80			
	422	10:30 "	78			
	423	10:35 "	76			
	424	10:40 "	74			
	425	10:45 "	72			
	426	10:50 "	70			
	427	10:55 "	68			
	428	11:00 "	66			
	429	11:05 "	64			
Mid depth	430	11:10 AM	62			
	431	11:15 "	60			
	432	11:20 "	58			
	433	11:25 "	56			
	434	11:30 "	54			
	435	11:35 PM	52			
	436	11:40 "	50			
	437	11:45 "	48			
	438	11:50 "	46			
	439	11:55 "	44			
	440	12:00 "	42			
	441	12:05 "	40			
	442	12:10 "	38			
	443	12:15 "	36			
Bottom, 72 fathoms	444	12:20 PM	34			
	445	12:25 "	32			
	446	12:30 "	30			
	447	12:35 "	28			
	448	12:40 "	26			
	449	12:45 "	24			
	450	12:50 "	22			
	451	12:55 "	20			
	452	1:00 PM	18			
	453	1:05 "	16			
	454	1:10 "	14			
	455	1:15 "	12			
	456	1:20 "	10			
	457	1:25 "	8			
458	1:30 "	6				
459	1:35 "	4				
460	1:40 "	2				
461	1:45 "	0				

THE UNIVERSITY OF CHICAGO

over-Disposal Methods: Dilution
New York Harbor Disposed Oxygen in 1951
Amount of Substances from Sewage Treatment

Average % of Substrates from Given Sections

Signature: *[Signature]*

References

EAST RIVER

ALL LAWRENCE P.

Page 205

19549

Answer 2: Yes, as shown 2

Jan. 3, 1918.

Date of Collection July 18, 1911

Low Carb 1 7:17 AM

11th Cir. Case 1:12-53 Doc.

	Sample No	Time	% of Salination	Average % Percent of Salination		
				Each Current?	All Depths	Both
<u>Lead Current? (continued)</u>						
<u>Depth 1 ft. or less?</u>				(continued) 54.6		
<u>Mid-depth</u>				(continued) 55.5		
<u>Bottom</u>	410	10:34 AM	59%			
	413	10:34 -	59			
	414	10:34 -	59			
	419	10:35 -	56			
	421	10:36 -	56			
	422	10:36 AM	59			
	423	1:08 -	54			
	441	1:06 -	56			
	444	1:09 -	56			
	447	2:03 -	54			
	450	2:03 -	54			
	453	3:13 -	54			
	456	3:23 -	54			
	459	3:48	54	(continued) 56.0	(continued) 55.6%	
	462	4:02	56			
<u>End Current? or complete fathom</u>						
				5.99	2.34	

ANALYSIS: DISPOSAL METHODS- Dilution

New York Harbour Dissolved Oxygen in 1901

Average C.C. per Liter. from Cross Sections

EAST RIVER
at Lawrence Pt.

FILE NO. 205

ACT. NO. 11381

Sheet 1 Total in Cover 2

Date Jan. 10 1902

ANALYZED BY G. M. M.

CHECKED BY

MADE BY CONTRACT NO. 1074

Date of Collection: July 18 1901

LW G. I 7⁰⁰ AM HW 12⁰² PM

	Sample No.	Time	Oxygen CC. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Flood Current</u>						
<u>Depth 1 ft</u>						
	419	10 10 AM	3.24			
	421	10 15 "	3.24			
	424	10 45 "	3.24			
	427	11 30 "	3.09			
	430	11 33 "	3.09			
	433	12 17 PM	3.09			
	434	1 00 "	2.95			
	439	1 13 "	2.95			
	443	1 46 "	2.95			
	445	2 30 "	2.95			
	448	2 50 "	2.95			
	451	3 10 "	2.95			
	454	3 30 "	2.95			
	457	3 45 "	2.95	(Average)		
	460	4 00 "	2.95	3.04		
<u>Mid-depth</u>						
	419	10 10 AM	3.24			
	425	10 24 "	3.04			
	428	10 44 "	3.04			
	429	11 31 "	3.09			
	431	11 34 "	3.09			
	436	12 18 PM	2.99			
	437	1 01 "	2.95			
	440	1 24 "	2.95			
	443	1 47 "	2.95			
	446	2 01 "	2.95			
	448	2 31 "	2.95			
	453	3 01 "	2.95			
	455	3 31 "	2.95			
	458	3 46 "	2.95	(Average)		
	461	4 01 "	3.09	3.05		
<u>Bottom, see sheet 2</u>						

C. C. P. 12

3932

THE PEOPLE OF THE STATE OF NEW YORK VS.

SUBJECT: DISPOSAL METHODS - Dilution
New York Harbor Dissolved Oxygen in 1961
Average C.C. per Liter. from Cross-Sections

EAST RIVER
AT LAWRENCE PT

FILE NO 205
ACC NO 1H382
SHEET 2 TOP IN COMP 2
DATE Jun. 10 1962

COMPUTED BY *ELH*

Checked by _____

mailto:info@cambridge.org/9780521876223

Date of Collection July 18, 1911

LW Gov I 7¹⁷AM H/12²²PM

	Sample No	Time	Oxygen CC per Liter	Averages CC per liter		Both Currents All Depths
				Each Depth	All Depths	
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	see sheet 1			(5 samples) 3.04		
<u>Mid-depth</u>	"			(3 samples) 3.05		
<u>Bottom</u>	420	10:18 AM	3.14			
	423	10:26 "	3.14			
	426	10:48 "	3.14			
	429	11:35 "	3.09			
	432	11:56 "	3.09			
	435	12:20 PM	3.14			
	438	1:03 "	2.95			
	441	1:26 "	3.09			
	444	1:49 "	3.09			
	447	2:33 "	2.95			
	450	2:53 "	2.95			
	453	3:13 "	2.95			
	456	3:33 "	2.98			
	459	3:48 "	2.95	(5 samples)	(45 samples)	
	462	4:03 "	3.09	<u>3.07</u>	3.05	
<u>Ebb Current, no sample taken</u>						

Ex 44 126

TUBES: DISPOSAL METHODS: Dilution

FILE NO

205

NEW YORK HARBOR Dissolved Oxygen in 1911

EAST RIVER

ACC NO

1H367

Average % of Saturation from Cross Sections

AT LAWRENCE PT

SHEET

1 OF 10 CONT 2

COMPILED BY

L. H. H.

CHECKED BY

DATE

Jan 8

1912

MADE IN CONNECTION WITH

Date of Collection, Oct 11, 1911

HW Gov I 9³⁰ AM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current Depth	All Depths	Both Currents & All Depths
<u>Flood Current</u> <u>Depth 1 Ft</u>	1894	7 50 AM	55%			
	1897	7 58 "	55			
	1900	8 06 "	56			
	1903	10 00 "	52			
	1906	10 08 "	52			
	1909	10 16 "	53			
	1912	12 00 PM	51			
	1915	12 08 PM	51			
	1918	12 16 "	52	(10 samples) 53 0%		
<u>Mid-depth</u>	1895	7 52 AM	55			
	1898	8 00 "	56			
	1901	8 08 "	56			
	1904	10 03 "	55			
	1907	10 10 "	57			
	1910	10 18 "	55			
	1913	12 02 PM	54			
	1916	12 10 "	56	(10 samples)		
	1919	12 18 "	55	55 3		
<u>Bottom</u>	1896	7 54 AM	55			
	1920	12 10 PM	55	55 3	54 5	
				Ev 44 37		
<u>Ebb Current</u> see sheet 2						

RECEIVED
 NEW YORK
 OCT 11 1911

 SUBJECT: DISPOSAL METHODS Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average % of Saturation - from Cross Sections
COMPUTED BY: CAH

CHECKED BY:

 EAST RIVER FILE NO. 205
 ACC. NO. 111368

AT LAWRENCE POINT SHEET 2 to in Case 2

DATE: Jan 8 1912

MADE BY (NAME) OR (NO.)

Date of Collection Oct 11 1911HW Day I 9⁰⁰ AM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Flood Current, see sheet 1</u>					(27 samples) 54.5%	
<u>Ebb Current</u>						
<u>Depth 1 ft</u>	1921	2 00 PM	55%			
	1924	2 08 "	55			
	1927	2 16 "	55			
	1930	4 00 "	59			
	1933	4 08 "	62			
	1936	4 16 "	60			
	1939	5 00 "	59			
	1942	5 08 "	62			
	1945	5 16 "	60	(9 samples) 58.6%		
<u>Mid-depth</u>	1932	2 02 "	55			
	1935	2 10 "	57			
	1938	2 18 "	55			
	1931	4 02 "	62			
	1934	4 10 "	64			
	1937	4 18 "	63			
	1940	5 02 "	62			
	1943	5 10 "	64	(9 samples) 60.6%		
	1946	5 18 "	63			
<u>Bottom</u>	1923	2 04 "	55			
			Same as			
	1947	5 20 "	63	Mid depth (9 samples) 60.6	(11 samples) 53.9	(24 samples) 57.0
				5.79	7.38	

SUBJECT DISPOSAL METHODS- Dilution

New York Harbor Dissolved Oxygen in 1911 EAST RIVERAverage C.C. per Liter. from Cross-Sections AT LAWRENCE POINTCOMPUTED BY ELLH.

CHECKED BY

FILE NO 205

ACC NO 111405

SHEET 1 TO 4 COMP 2

DATE Jan 15 1912

MADE IN CONNECTION WITH

Date of Collection: Oct 11 1911HWG. 1 9⁵⁰ AM

	Sample No.	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Flood Current</u>						
<u>Depth 1 ft</u>						
	1894	7:50 AM	3.28			
	1897	7:58 "	3.27			
	1900	8:06 "	3.33			
	1903	10:00 "	3.14			
	1906	10:08 "	3.12			
	1909	10:16 "	3.19			
	1912	12:00 PM	3.14			
	1915	12:08 PM	3.12	(9 samples)		
	1918	12:16 "	3.19	3.20		
<u>Mid-depth</u>						
	1895	7:52 AM	3.28			
	1898	8:00 "	3.27			
	1901	8:08 "	3.33			
	1904	10:02 "	3.28			
	1907	10:10 "	3.41			
	1910	10:18 "	3.33			
	1913	12:02 PM	3.28			
	1916	12:10 "	3.41	(9 samples)		
	1919	12:18 "	3.33	3.32		
<u>Bottom</u>						
	1896	7:54 AM	3.28			
			Same as			
			Mid-depth	(9 samples)	(9 samples)	
	1920	12:20 PM	3.33	3.32	3.28	
<u>Ebb Current see sheet 2</u>						
				3.27	3.28	

STANDARD METHOD OF DISPOSAL METHODS - Dilution
 New York Harbor Dissolved Oxygen in 1911 EAST RIVER
 Average C.C. per Liter. from Grasp Sections AT LAWRENCE POINT
 COMPUTED BY ELH. CHECKED BY _____
 DATE Jan. 15 1912

Date of Collection, Oct. 11 1911

HW Gov I 9 AM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current	Both Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Flood Current, see sheet 1</u>					(2 samples) 328	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>	1921	2 00 PM	3.28			
	1924	2 08 "	3.29			
	1927	2 16 "	3.33			
	1930	4 00 "	3.55			
	1933	4 08 "	3.70			
	1936	4 16 "	3.61			
	1939	5 00 "	3.55			
	1942	5 08 "	3.70	(3 samples)		
	1945	5 16 "	3.61	3.51		
<u>Mid-depth</u>	1922	2 02 "	3.28			
	1925	2 10 "	3.41			
	1928	2 18 "	3.33			
	1931	4 02 "	3.69			
	1934	4 10 "	3.84			
	1937	4 18 "	3.75			
	1940	5 05 "	3.69			
	1943	5 10 "	3.84	(3 samples)		
	1946	5 18 "	3.75	3.62		
<u>Bottom</u>	1923	2 04 "	3.28			
	1947	5 20 "	3.75	3.62	3.58	3.43
				6.99	7.40	

C. O. D. DISPOSAL Meters Dilution

New York Harbor Dissolved Oxygen in 1911

Average % of Saturation from Cross Sections

MOUTH OF
EAST RIVER

FILE NO 205

ACC NO. 11847

SHEET 1 TOT. IN COMP. 2

DATE Jan. 4, 1912

COMPUTED BY L. A. H.

CHECKED BY

MADE IN CONNECTION WITH

Date of Collection: July 27 1911HW Gov I 9²²AM LW Gov I 3²⁵PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	All Depths	Both Currents & All Depths
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	598	930 AM	54%			
	601	938 "	55			
	604	946 "	59			
	607	954 "	57			
	610	1002 "	55	(5 samples)	56.0%	
<u>Mid-depth</u>	599	931 "	54			
	602	939 "	55			
	605	947 "	62			
	608	955 "	61	(5 samples)	57.4	
	611	1003 "	55			
<u>Bottom</u>	600	932 "	54			
	603	941 "	55			
	606	949 "	62			
	609	957 "	61	(5 samples)	(5 samples)	
	612	1005 "	55	57.4	56.9%	
<u>Ebb Current</u> see sheet 2						
				C. 49 P. 41		

SUBJECT DISPOSAL METHODS Dilution FILE NO. 205
New York Harbor Dissolved Oxygen in 1911 ACC. NO. 1H348
Average % of Saturation - from Cross Sections MOUTH OF SHEET 2 TOT. IN COUR. 7.
EAST RIVER DATE Jan 4 1912.
 COMPUTED BY G.A.H. CHECKED BY _____
 MADE IN CONNECTION WITH _____

Date of Collection, July 27 1911HWGav I 9²²AM LWGav I 3²⁵PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	All Depths	Both Currents & All Depths
<u>Flood Current</u> see sheet 1					56.9% (48 samples)	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>	613	12.00 M	52%			
	616	12.08 PM	53			
	619	12.16 "	57			
	622	12.24 "	55			
	625	12.32 "	53			
	628	2.00 "	49			
	631	2.08 "	51			
	634	2.16 "	54			
	637	2.24 "	52	(10 samples)		
	640	2.32 "	50	52.6%		
<u>Mid-depth</u>	614	12.01 "	52			
	617	12.09 "	53			
	620	12.17 "	60			
	623	12.25 "	58			
	626	12.33 "	53			
	629	12.41 "	49			
	632	2.09 "	51			
	635	2.17 "	56			
	638	2.25 "	52	(10 samples)		
	641	2.33 "	50	53.4%		
<u>Bottom</u>	615	12.03 "	52			
	618	12.11 "	53			
	621	12.19 "	60			
	624	12.27 "	58			
	627	12.35 "	53			
	630	2.03 "	49			
	633	2.11 "	51			
	636	2.19 "	56			
	639	2.27 "	52	(10 samples)	(30 samples)	(45 samples)
	642	2.35 "	50	53.4	53.1	55%
				Ex 99	P 42	

SUBJECT: DISPOSAL METHODS - Dilution
 New York Harbor Dissolved Oxygen in PM1 MOUTH OF
 Average C.C. per Liter. from 0100-5:00 PM EAST RIVER
 COMPUTED BY: W.A.H. CORRECTED BY: _____
 FILE NO. 205
 ACC. NO. 1H385
 SHEET 1 Tot. in Case 2
 DATE Jan. 11 1912

Date of Collection July 27 1911

Hour of I DAY LW 5:05 PM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents in All Depths
				Each Depth	All Depths	
<u>Flood Current</u>						
Depth 1 Ft.	596	9:30 AM	2.97			
	601	9:30 "	3.03			
	604	9:40 "	3.34			
	607	9:54 "	3.14	(Samples)		
	610	10:02 "	3.01	3.08		
<u>Mid-depth</u>						
	598	9:31 "	3.01			
	603	9:38 "	3.03			
	605	9:47 "	3.38			
	608	9:53 "	3.29	(Samples)		
	611	10:03 "	3.01	3.14		
<u>Bottom</u>						
	600	9:33 "	2.97			
	603	9:41 "	3.03			
	606	9:49 "	3.30			
	609	9:57 "	3.29	(Samples)	(Samples)	
	612	10:05 "	3.01	3.14	3.12	
<u>Ebb Current? see sheet 2</u>						
				E = 99	P 42	

SUBJECT: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C.C. per Liter. from Cross-Sections
 COMPILED BY W.H.H. CHECKED BY _____
 DATE Jan 11 1912

Page No. 205
 ACC. No. 14386

MOUTH OF
EAST RIVER

Sheet 2. Tot. in Col. 2.

Date of Collection. July 27, 1911

HW Gov I 9:30 AM LW 3:25 PM

	Sample No	Time	Oxygen CC per Liter	Averages C.C. per Liter		
				Each Current	All Currents	Both Currents
				Each Depth	All Depths	Both Depths
Flood Current, see sheet 1					(5 samples) 3.12	
Ebb Current						
Depth 1 Ft	613	12:00 PM	2.81			
	616	12:05 PM	2.90			
	619	12:10 "	3.09			
	622	12:14 "	3.00			
	625	12:21 "	3.08			
	628	2:00 "	2.70			
	631	2:08 "	2.76			
	634	2:16 "	2.85			
	637	2:24 "	2.86			
	640	2:31 "	2.74	(5 samples) 2.87		
Mid-depth						
	614	12:01 "	2.81			
	617	12:06 "	2.90			
	620	12:17 "	3.04			
	623	12:25 "	3.14			
	626	12:33 "	3.08			
	629	2:01 "	2.70			
	632	2:09 "	2.76			
	635	2:17 "	2.89			
	638	2:25 "	2.86	(5 samples) 2.91		
	641	2:33 "	2.74			
Bottom						
	615	12:03 "	2.81			
			(5 samples) 2.87			
	642	2:35 "	2.74	(5 samples) 2.91	(5 samples) 2.90	(5 samples) 3.01

62.99.244

Dissolved Oxygen: Method: Dilution

Newark Harbor Dissolved Oxygen in 1911

Average % of Saturation from Cross Sections

Mouth of

EAGLE RIVER

P.L.S. NO. 205

ACC. NO. 11849

Sheet 1 of 2

Date JUN 4 1911

Collected by G. A. H.

Checked by

Made at Cambridge, N.H.

Date of Collection: Aug. 3 1911

LW Gov I 9:17 AM HW Gov I 3:12 PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation	
				Each Current	
				Each Depth	All Depths
<u>Ebb Current</u>					
<u>Depth 1 ft</u>	768	9:16 AM	50%		
	771	9:16 "	51		
	774	9:16 "	54		
	777	9:16 "	53	(sample)	
	780	9:17 "	52	51.6%	
<u>Mid-depth</u>	769	9:15 "	55		
	772	9:16 "	56		
	775	9:17 "	57		
	778	9:18 "	55	(sample)	
	781	9:18 "	53	55.2	
<u>Bottom</u>	770	9:13 "	58		
	773	9:14 "	56		
	776	9:20 "	57		
	779	9:27 "	58	(sample)	
	782	9:45 "	52	55.2	54.6%
<u>Flood Current</u> sheet 2					
				G. A. H.	P. A. S.

Bureau of Biological Resources Division
 New York Marine Biological Laboratory (NYMBL)
 Average % of Substrate from Cores Sampled
 Date of Collection: Aug 3, 1941
 Location: mouth of EAST RIVER
 Date: Aug 4, 1941

Date of Collection: Aug 3, 1941LWGS: I 9⁰⁰ AM HWGS: I 3¹⁵ PM

	Sample No	Time	% of Substrate	Average % of Substrate		
				Each Depth	All Depths	Bottom
<u>Ebb Current</u> (approx. 1 ft)					54.0% (1 Sample)	
<u>Flood Current</u> <u>Depth 1 ft</u>	799	11:55 AM	54%			
	786	12:03 PM	55			
	789	12:11 "	56			
	793	12:19 "	55			
	795	12:27 "	50			
	796	12:30 "	59			
	801	2:48 "	60			
	804	3:24 "	61			
	807	3:44 "	60			
	810	3:52 "	60		57.0% (1 Sample)	
<u>Mid depth</u>	784	11:56 AM	54			
	787	12:04 PM	55			
	790	12:12 "	56			
	793	12:20 "	55			
	794	12:28 "	53			
	799	2:41 "	59			
	802	2:49 "	60			
	805	2:57 "	61			
	808	3:05 "	60			
	811	3:13 "	60		57.3 (1 Sample)	
<u>Bottom</u>	785	11:58 AM	54			
	788	12:06 PM	55			
	791	12:14 "	56			
	794	12:22 "	55			
	797	12:30 "	53			
	800	2:43 "	59			
	803	2:51 "	60			
	806	2:59 "	61			
	809	3:07 "	60			
	812	3:15 "	60		57.5 (1 Sample)	56.5 (1 Sample)
				57.9 (1 Sample)	57.2 (1 Sample)	56.5 (1 Sample)
					57.9	56.5

BODIES DISPOSAL METHOD: Dilution

New York Harbor Dissolved Oxygen in PPM

Average C.C. per Liter from Open Sections

Location: Liberty

Coordinates

File No. 205

Box No. IN367

Sheet 1 of 2 Sheets 2.

Date Jan 01 1943

Date of Collection Aug 3, 1943

Low Day 1 10⁰⁷ AM (Low 3¹⁰ PM)

	Sample No.	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current	All Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Upb Current</u>						
<u>Depth 1 ft</u>	748	9:10 AM	2.70			
	751	9:15 "	2.76			
	754	9:20 "	2.92			
	757	9:24 "	2.84	(Sampled)		
	760	9:27 "	2.74	2.80		
<u>Mid-depth</u>						
<u>Bottom</u>	749	9:11 "	2.37			
	752	9:16 "	2.43			
	755	9:21 "	2.49			
	758	9:26 "	2.44 (Sampled)			
	761	9:29 "	2.45	2.49		
<u>Flow Current</u>						
	750	9:13 "	2.97			
	753	9:18 "	2.93			
	756	9:23 "	2.95			
	759	9:27 "	2.88	(Sampled)	(Sampled)	
	762	9:30 "	2.88	2.88	2.93	
				2.94	2.97	

SUBJECT: DISPOSAL METHODS - Dilution
 RE: Van Marsee Disposed Copper in PBI
 ANALY: C.C. per liter, from Gross Sections
 SAMPLED BY: T.H.H.
 ANALYST: MOUTH OF EAST RIVER
 FILE NO: 205
 ACC NO: IN388
 SHEET 2 of 2 in Group 2.
 DATE: Jan 11 1953

Date of Collection Aug 3 1951

Loc. Gen. I 07 AM Near S.D. Pm

	Sample No.	Time	Oxygen CC per Liter	Averages CC per Liter		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Can Current (nearest)</u>					(Average)	
					2.93	
<u>Flood Current</u>						
	<u>Depth 1 Ft.</u>					
	783	11:55 AM	2.97			
	786	12:02 PM	3.03			
	789	12:11 "	3.09			
	792	12:19 "	3.00			
	785	12:25 "	2.74			
	788	2:48 "	3.14			
	801	2:48 "	3.21			
	804	2:54 "	3.30			
	807	3:04 "	3.10	(Average)		
	810	3:12 "	3.09		3.13	
<u>Mid-depth</u>						
	784	11:56 AM	2.97			
	787	12:04 PM	3.03			
	790	12:13 "	3.09			
	793	12:20 "	3.00			
	796	12:26 "	2.68			
	799	2:47 "	3.14			
	802	2:49 "	3.21			
	805	2:57 "	3.30			
	808	3:05 "	3.10	(Average)		
	811	3:12 "	3.09		3.13	
<u>Bottom</u>						
	785	11:58 AM	2.97			
			Same as			
	812	3:17 PM	3.20	(Average)	3.12	(Average)
					3.14	3.04
				5.90	7.45	

ANALYSIS BY DISPOSAL METHODS DISTRICT
 New York Harbor Dissolved Oxygen in 1911
 Average % of Saturation from Cross Sections

MONTH OF
EAST RIVER

FILE NO. 205
 ALL NO. 11360
 over 1 ton weight 2
 Date July 6, 1911

COMPILED BY
 C. H. H.

INSPECTED BY

Date of Collection Sept 29 1911, LWG. 1 6:57 AM. HWG. 2 6:00 PM LW 7:27 PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Ebb Current?		
				Each Depth	All Depths	Both Currents At Depths
<u>Ebb Current?</u>						
<u>Depth 1 Ft</u>						
	1604	7 30AM	49%			
	1607	7 00 "	49			
	1608	7 46 "	51			
	1609	7 54 "	50			
	1606	8 02 "	49			
	1744	4 30PM	51			
	1747	4 38 "	52			
	1750	4 46 "	54			
	1753	4 54 "	53			
	1756	5 02 "	53			
	1759	5 10 "	49			
	1763	5 18 "	52			
	1765	5 26 "	54			
	1768	5 34 "	53			
	1771	5 42 "	49	51.0%		
<u>Mid depth</u>						
	1603	7 32AM	51			
	1608	7 40 "	52			
	1601	7 48 "	54			
	1604	7 56 "	53			
	1607	8 04 "	52			
	1743	4 32PM	51			
	1748	4 40 "	50			
	1751	4 48 "	56			
	1754	4 56 "	53			
	1757	5 04 "	52			
	1760	5 12 "	51			
	1763	5 20 "	52			
	1766	5 28 "	54			
	1769	5 36 "	53			
	1772	5 44 "	52	52.9		
<u>Bottom</u>						
	1606	7 34AM	51			
	1773	6 30 PM	52	52.9	55.8%	
Grand Total				52.9	55.8%	
Mean of all				52.9	55.8%	
Mean of all				52.9	55.8%	

Flood Current see sheet 2

3945

RECEIVED FROM
RECEIVED
BY
DATE

SUBJECT DISPOSAL METHODS Dilution

New York Harbor Dissolved Oxygen in 1911

Average % of Saturation from Cross Sections

COMPUTED BY *EAH*

MADE IN CONNECTION WITH

MOUTH OF

EAST RIVER

CHECKED BY

FILE NO 205

ACC. NO. 1H361

SHEET 2 TOT. IN COMP. 2

DATE Jan 6 1912

Date of Collection, Sept 29, 1911

LW 6¹¹ AM HW 12⁵³ PM LW 7²⁷ PM

	Sample No	Time	% of Saturation	Average % Percent of Saturation		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Ebb Current, see sheet 1</u>					52.3% (6 samples)	
<u>Flood Current</u>						
<u>Depth 1 Ft</u>						
	1699	9 30 AM	53%			
	1702	9 38 "	54			
	1705	9 46 "	56			
	1708	9 54 "	55			
	1711	10 02 "	48			
	1714	12 30 PM	55			
	1717	12 40 "	56			
	1720	12 49 "	59			
	1723	12 57 "	58			
	1726	1 05 "	54			
	1729	2 30 "	58			
	1732	2 38 "	58			
	1735	2 46 "	59			
	1738	2 54 "	58	(5 samples)		
	1741	3 02 "	56	55.9%		
<u>Mid-depth</u>						
	1700	9 32 AM	55			
	1703	9 40 "	56			
	1706	9 48 "	56			
	1709	9 56 "	55			
	1712	10 04 "	51			
	1715	12 32 PM	58			
	1718	12 42 "	59			
	1721	12 51 "	59			
	1724	12 59 "	58			
	1727	1 07 "	56			
	1730	2 32 "	58			
	1733	2 40 "	59			
	1736	2 48 "	59			
	1739	2 56 "	58	(5 samples)		
	1742	3 04 "	56	56.9		
<u>Bottom</u>						
	1701	9 34 PM	55			
			Same as			
			Mid-depth	(5 samples)	(5 samples)	(90 samples)
	1743	3 06 PM	56	56.9	56.6	54%
				6 x 99	9.50	

3947

MOUTH OF
EAST RIVER

Acc. No. 398

Page 1 of 1

DATE Jan 12 1962

COMPUTED BY *GLH*

CHECKED BY

6. 2008年12月1日，甲公司以公允价值为1000万元的固定资产换入乙公司公允价值为800万元的固定资产，另收到乙公司支付的补价200万元。假定不考虑相关税费，甲公司换入乙公司固定资产的入账价值为（ ）万元。

LW Gov I 6⁴⁷AM HW 12⁰³PM LW 7³¹PM

	Sample No	Time	Oxygen C C per Liter	Averages C C per Liter		
				Each Current		Both Currents All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>	1684	7 30 AM	2 73			
	1687	7 38 "	2 80			
	1690	7 46 "	2 92			
	1693	7 54 "	2 84			
	1696	8 02 "	2 79			
	1744	4 30 PM	2 87			
	1747	4 38 "	2 94			
	1750	4 46 "	3 04			
	1753	4 54 "	3 00			
	1756	5 02 "	2 92			
	1759	6 00 "	2 73			
	1762	6 06 "	2 96			
	1765	6 13 "	3 04			
	1768	6 20 "	3 00			
	1771	6 27 "	2 79	(4 samples)	2 89	
<u>Mid-depth</u>	1685	7 32 AM	2 87			
	1688	7 40 "	2 94			
	1691	7 48 "	3 04			
	1694	7 56 "	3 00			
	1697	8 04 "	2 92			
	1745	4 32 PM	2 87			
	1748	4 40 "	3 08			
	1751	4 48 "	3 15			
	1754	4 56 "	3 12			
	1757	5 04 "	2 92			
	1760	6 01 "	2 87			
	1763	6 07 "	2 94			
	1766	6 14 "	3 04			
	1769	6 21 "	3 00	(5 samples)	2 98	
	1772	6 28 "	2 92			
<u>Bottom</u>	1686	7 36 AM	2 87			
			Same as			
	1773	6 30 PM	2 92	(3 samples)	2 98	(45 samples)
				6 99		2 95
					6 99	2 91
Flood Current: see sheet 2						

SUBJECT: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C.C. per Liter. from Cross-Sections

COMPUTED BY: W.H.H. CHECKED BY: _____

PLS. NO. 205
 ACC. NO. 1H399
 SHEET 2 OF 2 IN GROUP 2
 DATE Jan 12 1912

MOUTH OF
EAST RIVER

Date of Collection, Sept 29 1911

LW 6:27 AM HW 12:23 PM LW 7:27 PM

	Sample No	Time	Oxygen C.C. per Liter	Average C.C. per Liter		
				Each Current Depth	All Depths	Both Currents & All Depths
<u>Ebb Current see sheet 1</u>					2 95 (3 samples)	
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	1699	9 30 AM	3 01			
	1702	9 38 "	3 00			
	1705	9 46 "	3 19			
	1708	9 54 "	3 17			
	1711	10 02 "	2 73			
	1714	12 30 PM	3 14			
	1717	12 40 "	3 19			
	1720	12 49 "	3 33			
	1723	12 57 "	3 27			
	1726	1 05 "	3 06			
	1729	2 30 "	3 20			
	1732	2 38 "	3 30			
	1735	2 46 "	3 33			
	1738	2 54 "	3 27	(2 samples)		
	1741	3 02 "	3 19	3 17		
<u>Mid-depth</u>	1700	9 32 AM	3 14			
	1703	9 40 "	3 19			
	1706	9 48 "	3 19			
	1709	9 56 "	3 12			
	1712	10 04 "	2 93			
	1715	12 32 PM	3 20			
	1718	12 42 "	3 30			
	1721	12 51 "	3 33			
	1724	1 00 "	3 27			
	1727	1 07 "	3 19			
	1730	2 32 "	3 20			
	1733	2 40 "	3 26			
	1736	2 48 "	3 33			
	1739	2 56 "	3 27	(3 samples)		
	1742	3 04 "	3 13	3 23		
<u>Bottom</u>	1701	9 34 AM	3 14			
	1743	3 06 PM	3 19	3 23	3 21	3 08

E. 99 P. 52

SUBJECT DISPOSAL METHODS Dilution

New York Harbor Dissolved Oxygen in 1911

Average % of Saturation - from Cross Sections

EAST END OF

KILL VAN KULL

FILE NO

205

ACC. NO

1H362

SHEET

1 TOT. IN COMP. 2

COMPUTED BY

EAT.

CHECKED BY

DATE

Jan 8

1912

MADE IN CONNECTION WITH

Date of Collection Oct. 4 1911

HW Govl 5²³ AMLW 11¹³ AMHWS 2⁰⁰ PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	Both Currents & All Depths	Both Currents & All Depths
<u>Flood Current</u>						
<u>Depth 1 ft</u>	1774	730 AM	69%			
	1777	730 "	71			
	1780	748 "	70			
	1801	130 PM	69			
	1804	129 "	71			
	1807	148 "	75			
	1810	330 "	70			
	1813	335 "	72			
	1816	348 "	73			
	1819	530 "	73			
	1822	534 "	77			
	1825	548 "	78	(2 samples)	72.5%	
<u>Mid-depth</u>	1775	732 AM	74			
	1778	741 "	76			
	1781	750 "	75			
	1802	132 PM	73			
	1805	141 "	76			
	1808	150 "	77			
	1811	332 "	76			
	1814	341 "	77			
	1817	350 "	76			
	1820	532 "	80			
	1823	541 "	82	(2 samples)		
	1826	550 "	81		76.9	
<u>Bottom</u>	1776	734 AM	79			
	1779	743 "	81			
	1782	752 "	80			
	1803	134 PM	73			
	1806	143 "	76			
	1809	152 "	77			
	1812	334 "	76			
	1815	343 "	77			
	1818	352 "	73			
	1821	534 "	80			
	1824	543 "	82	(2 samples)		
	1827	552 "	81		77.9	75.8%
				C ₂ 99	P 53	

NO. 100-1000
RECEIVED
OCTOBER 10
1911

SUBJECT: DISPOSAL METHODS - Dilution

NEW YORK HARBOR Dissolved Oxygen in 1911

Average % of Saturation - from Cross Sections

COMPUTED BY LAH

CHAS. H. B. B. V.

EAST END OF

KILL VAN HULL

FILE NO.

205

BOX NO.

11863

SHEET

2

TOT. in CORR. 2

DATE

Jun 8

1912

MADE IN CONNELL 100 1011

Date of Collection, Oct 4 1911

HW GOS I 5⁰⁰ AM LWN 10 AM HW 3²⁰ PM

	Sample No	Time	% of Saturation	Average Percent of Saturation		
				Percent of Current		Both Currents & All Depths
				Each Depth	All Depths	
				(4 samples)	75.0%	
<u>Flood Current, sec sheet 1</u>						
<u>Ebb Current</u>						
<u>Depth 1 ft</u>						
	1783	9 30 AM	73			
	1786	9 39 "	75			
	1789	9 48 "	74			
	1791	10 00 "	68			
	1795	11 39 "	71	(4 samples)		
	1798	11 48 "	70		71.8%	
<u>Mid-depth</u>						
	1784	9 32 "	73			
	1787	9 41 "	75			
	1790	9 50 "	76			
	1793	11 32 "	73			
	1796	11 41 "	76	(4 samples)		
	1799	11 50 "	74		74.5	
<u>Bottom</u>						
	1785	9 34 "	73			
	1788	9 43 "	75			
	1791	9 51 "	76			
	1794	11 34 "	73			
	1797	11 43 "	76	(4 samples)	(13 samples)	(24 samples)
	1800	11 52 "	74		74.5	75.0%
				6.99	7.54	

SUBJECT: DISPOSAL METHODS - Dilution
 New York Harbor Dissolved Oxygen in 1911
 Average C.C. per Liter. from Cross-Sections

EAST END OF
 KILL VAN KULL

FILE NO. 205
 REG. NO. 1M400
 SHEET: 1 TOT. IN GROUP 2
 DATE Jan 13 1912

COMPUTED BY: ELM

CHECKED BY:

MADE IN CONNECTION WITH:

Date of Collection Oct 4 1911

HWGI 5:20 AM LW 11:40 AM HW 3:20 PM

	Sample No.	Time	Dissolved C.C. per Liter	Averages C.C. per Liter		
				Each Current	All Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Flood Current</u>						
<u>Depth 1 ft</u>	1774	7:30 AM	410			
	1777	7:30 "	420			
	1780	7:40 "	417			
	1801	1:30 PM	410			
	1804	1:30 "	424			
	1807	1:40 "	444			
	1810	3:30 "	470			
	1813	3:40 "	477			
	1816	3:40 "	476			
	1819	3:50 "	478			
	1831	3:50 "	444	(sampled)		
	1825	3:40 "	454	426		
<u>Mid-depth</u>	1775	7:30 AM	428			
	1778	7:41 "	449			
	1781	7:50 "	444			
	1802	1:35 PM	438			
	1805	1:41 "	435			
	1808	1:50 "	438			
	1811	2:51 "	430			
	1814	3:41 "	444			
	1817	3:50 "	440			
	1820	3:52 "	465			
	1823	3:41 "	472	(sampled)		
	1826	3:50 "	460	451		
<u>Bottom</u>	1776	7:34 AM	445			
	1779	7:43 "	478			
	1782	7:52 "	472			
	1803	1:34 PM	430			
	1806	1:43 "	465			
	1809	1:52 "	458			
	1812	3:24 "	438			
	1815	3:43 "	444			
	1818	3:51 "	474			
	1821	3:54 "	465			
	1824	3:43 "	472	(sampled)		
	1827	3:52 "	449	457	445	
					2.50 P.S.	

SUBJECT: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911 EAST END OF
 Average C.C. per Liter. from Quota-Sections KILL VAN KULL
 COMPUTED BY: W. H. H. CHECKED BY: _____
 FILE NO. 20.5
 ACC. NO. 1H401
 SHEET 2 TOT. IN COMP. 2
 DATE Jan 13 1912

Date of Collection, Oct 4, 1911

NW 6:15 AM LW 11:45 AM HW 3:25 PM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents - All Depths
				Each Depth	All Depths	
<u>Flood Current see sheet 1</u>					(6 samples) 4.45	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>	1783	9:30 AM	4.38			
	1786	9:35 "	4.4			
	1789	9:45 "	4.44			
	1792	11:30 "	4.10			
	1795	11:39 "	4.36	(6 samples)		
	1798	11:45 "	4.17	4.30		
<u>Mid-depth</u>	1784	9:32 "	4.38			
	1787	9:41 "	4.40			
	1790	9:50 "	4.38			
	1793	11:33 "	4.38			
	1796	11:41 "	4.56	(6 samples)		
	1799	11:50 "	4.64	4.47		
<u>Bottom</u>	1785	9:34 "	4.38			
	Sample 4.43			
	1800	11:52 "	4.44	Mid depth (6 samples) 4.47 6.99	(6 samples) 4.41 7.06	(6 samples) 4.43

Subject: DISPOSAL METHODS: Dredge
 NEWARK HARBOR Dissolved Oxygen in 1911
 Average % of Saturation - from Cross Sections

THE
NARROWS

FILE NO. 205

ACC. NO. 1H351

SHEET 101 of 104

DATE Jan 4, 1912

COMPUTED BY L.H.H.

CHECKED BY

MADE IN CONNECTION WITH

Date of Collection Aug. 9, 1911

HW Gov. I 7:45 AM. LW Gov. I. 2:27 PM.

	Sample No.	Time	% of Saturation	Average % Percent of Saturation		
				Each Current	All Currents	Both Currents
				Depth	Depth	Depth
<u>Ebb Current</u>						
<u>Depth 1 ft</u>	876	9:40 AM	74%			
	879	9:50 "	76			
	881	10:00 "	76			
	885	11:40 "	64			
	888	12:00 PM	66			
	891	12:10 PM	65			
	894	1:10 "	64			
	897	1:20 "	67	(8 samples)		
	900	1:30 "	66	68.7%		
<u>Mid-depth</u>	877	9:13 AM	79			
	880	9:32 "	81			
	883	10:02 "	82			
	886	11:42 "	69			
	889	12:02 PM	69			
	892	12:12 "	71			
	895	1:12 "	70			
	898	1:22 "	69	(8 samples)		
	901	1:32 "	69	73.3		
<u>Bottom</u>	878	9:44 AM	73			
	881	9:54 "	82			
	884	10:04 "	82			
	887	11:44 "	69			
	890	12:04 "	69			
	893	12:14 "	71			
	896	1:14 "	70			
	899	1:24 "	69	(8 samples)	(87 samples)	
	902	1:34 "	69	73.3	71.8%	
<u>Flood Current</u>	no samples taken					
			Ex 99	P 57		

ANALYST: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in PM
 Average C.C. per Liter. From Cross-Sections
 COMPLETED BY: *W.H.M.* CHECKED BY:

THE
NARROWS

Paid No. 205
 Acc. No. 1H389
 Date Jan 11 1915

MADE BY CONSULTING OFFICE

Date of Collection Aug. 9 1911.

New York I. 7 AM LW 240 FT

	Sample No	Time	Oxygen CC per Liter	Averaged C.C. per Liter		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 FT</u>						
	876	6:40 AM	4.01			
	879	9:00 "	4.00			
	883	10:00 "	4.10			
	885	11:40 "	3.43			
	888	12:00 PM	3.37			
	891	12:40 PM	3.43			
	894	1:40 "	3.43			
	897	1:50 "	3.50	(Sampled)		
	900	1:50 "	3.53	3.70		
<u>Mid depth</u>						
	877	9:40 AM	4.24			
	880	9:50 "	4.28			
	883	10:00 "	4.43			
	886	11:40 "	3.78			
	889	12:00 PM	3.70			
	892	12:10 "	3.83			
	895	1:10 "	3.78			
	898	1:50 "	3.70	(Sampled)		
	901	1:50 "	3.48	3.93		
<u>Bottom</u>						
	878	9:40 AM	4.24			
	881	9:50 "	4.28			
	884	10:00 "	4.43			
	887	11:40 "	3.78			
	890	12:00 PM	3.70			
	893	12:10 "	3.83			
	896	1:10 "	3.78			
	899	1:50 "	3.70	(Sampled)		
	902	1:50 PM	3.68	3.93	3.96	
<u>Flood Current, 20 Samples Taken</u>						
				6.92	7.78	

ANALYSIS: DISPOSAL METHOD: Dilution

New York Harbor Dissolved Oxygen in FBI

Average % of Saturation from Cross Section

CONDUCTED BY: 6414

CHECKED BY:

THE
NARROWS

FILE NO. 208

FILE NO. 1H564

Sheet 1 of 3

DATE Jan. 5 1913

Date of Collection Sept 26, 1911

LW 6:14 AM HW 10:30 AM LW 4:42 PM

	Sample No.	Time	% of Saturation	Average % Percent of Saturation		
				Each Current	All Currents	Both Currents
				Depth	Depth	All Depths
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	1474	6:30 AM	65 %			
	1477	6:30 -	67			
	1480	6:40 -	69			
	1483	6:57 -	68			
	1486	7:04 -	64			
	1489	8:30 -	83			
	1491	8:39 -	85			
	1495	8:48 -	85			
	1498	8:57 -	86			
	1501	9:04 -	84			
	1504	10:30 -	85			
	1507	10:39 -	87			
	1510	10:48 -	88			
	1513	10:57 -	89	(9 samples)		
	1516	11:04 -	89	78.7 %		
<u>Mid-depth</u>	1475	6:32 -	68			
	1478	6:41 -	70			
	1481	6:50 -	70			
	1484	6:59 -	69			
	1487	7:08 -	69			
	1490	8:30 -	89			
	1493	8:41 -	91			
	1496	8:50 -	89			
	1499	8:59 -	90			
	1503	9:08 -	90			
	1506	10:30 -	89			
	1509	10:41 -	91			
	1512	10:50 -	89			
	1514	10:59 -	90	(9 samples)		
	1517	11:04 -	90	82.9		
<u>Bottom</u>	1476	6:34 -	68			
	1479		Same as			
	etc.		Mid depth			
	1518	11:10 -	90	(9 samples)	(9 samples)	
				82.9	81.3 %	
				6.70	7.20	

NO. 100-1000
 COUNTY OF
 NEW YORK

SUBJECT: DISPOSAL METHODS. Disposal
 New York Harbor Disposed Oxygen in 1911
 Average % of Saturation from Ozone Sootings

Submitted by: EAH.

Checked by:

THE
NARROWS

FILE NO. 205
 ACC. NO. 14335
 SHEET 2 OF 10 SHEETS 3
 DATE Jan. 5 1956

Date of Collection Sept. 26, 1911

LW 1st 1:40 AM LW 2nd 10:00 AM LW 3rd 6:00 PM

	Sample No.	Time	% of Saturation	Average Percent of Saturation		
				Each Depth	All Depths	Both Currents & All Depths
<u>Ebb Current</u> <u>Depth 15'</u>	1519	12:30 PM	85%			
	1522	12:30 "	87			
	1525	12:40 "	88			
	1528	12:47 "	85			
	1531	1:04 "	84			
	1534	2:30 "	77			
	1537	3:39 "	79			
	1540	3:48 "	77			
	1543	3:57 "	75			
	1546	3:56 "	77			
	1549	4:30 "	70			
	1552	4:39 "	73			
	1555	4:48 "	73			
	1558	4:57 "	70			
	1561	5:06 "	69			
	1564	6:00 "	65			
	1567	6:08 "	67			
	1570	6:16 "	69			
	1573	6:24 "	68			
	1576	6:32 "	66			
			66.90	75.0%		

DISPOSAL PURPOSES - Dredge
New York Harbor Dissolved Oxygen in O₂
Average % of Saturation - from Cross Sections

THE
NARROWS

FILE NO. 205
ACC. NO. 111356
DATE: 3 10-11-1908
DATE Jan 5 1911

COMPILED BY: Leif CHECKED BY:

Date of Collection: Sept 26, 1911

LW 3:41 AM. HW 10:41 AM LW 4:37 PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Depth	All Depths	Both Currents & All Depths
<u>Flood Current</u> <u>surface</u> 1					(not sampled) 81.8%	
<u>Ebb Current</u> <u>Depth 1 Fr</u> <u>see mast 2</u>				(not sampled) 75.0%		
<u>Mid-depth</u>	1510	12:35 PM	84.7			
	1513	12:41 "	88			
	1516	12:50 "	89			
	1519	12:59 "	87			
	1521	1:08 "	88			
	1525	1:12 "	81			
	1528	1:41 "	86			
	1541	1:50 "	78			
	1544	1:59 "	74			
	1547	2:08 "	77			
	1550	2:11 "	76			
	1553	2:41 "	73			
	1556	2:50 "	72			
	1559	2:59 "	71			
	1561	3:08 "	73			
	1565	3:42 "	68			
	1568	3:10 "	69			
	1571	3:18 "	73			
	1574	3:24 "	71			
	1577	3:34 "	69	(not sampled) 74.8%		
<u>Bottom</u>	1531	12:38 "	84			
	1534	12:43 "	88			
	etc		same as Mid-depth			
	1575	3:18 "	71	(not sampled) 76.2	(not sampled) 76.2	(not sampled) 79%
	1576	3:24 "	69	6.9%	6.7	

METHOD OF ANALYSIS: **SUBJECT DISPOSAL METHODS- Dilution**
 NEW YORK HARBOR **Dissolved Oxygen in 1911**
 Average C.C. per Liter. from Cross-Sections **THE NARROWS**
 COMPUTED BY: **ELLER** CHECKED BY: _____
 FILE NO. **205**
 ACC. NO. **11392**
 SHEET **1** TOT. IN COM. **3**
 DATE **June 12** 1912
 MADE IN CONNECTION WITH: _____

Date of Collection **Sept 26 1911** LWG. 14¹⁷AM HW 10³³AM LW 4⁵⁷PM

	Sample	Time	Oxygen CC per Liter	Averages C C per Liter		
				Each Current Depth	All Depths	Both Currents & All Depths
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	1474	6 30 AM	369			
	1477	6 32 "	378			
	1480	6 40 "	391			
	1483	6 57 "	384			
	1486	7 04 "	375			
	1489	8 30 "	465			
	1492	8 39 "	476			
	1495	8 48 "	478			
	1498	8 57 "	483			
	1501	9 04 "	472			
	1504	10 30 "	478			
	1507	10 39 "	480			
	1510	10 46 "	492			
	1513	10 57 "	500	(5 samples)		
	1516	11 04 "	500	449		
<u>Mid-depth</u>	1475	6 32 "	383			
	1478	6 41 "	392			
	1481	6 50 "	391			
	1484	6 59 "	384			
	1487	7 08 "	389			
	1490	8 32 "	494			
	1493	8 41 "	504			
	1496	8 50 "	492			
	1499	8 59 "	500			
	1502	9 08 "	500			
	1505	10 35 "	494			
	1508	10 41 "	504			
	1511	10 50 "	492			
	1514	10 59 "	500	(5 samples)		
	1517	11 08 "	500	461		
<u>Bottom</u>	1476	6 34 "	383			
			Same as			
	1518	11 10 "	500	(5 samples)	(5 samples)	
			Mid-depth	461	457	
				6 x 99	P. 62	

SUBJECT DISPOSAL METHODS- Dilution
New York Harbor Dissolved Oxygen in 1911
Average C.C. per Liter. from Cross-Sections

THE
NARROWS

FILE NO 205

ACC. NO 1H393

SHEET 2 TOT IN COMP 3

DATE Jan 12 1912

COMPUTED BY *W.A.H.*

CHECKED BY

MADE IN CONNECTION WITH

Date of Collection, Sept 26 1911

LW 6:01 AM HW 10:23 AM LW 4:27 PM

	Sample No.	Time	Oxygen C C per Liter	Averages. C C per Liter		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>						
	1519	12 30 PM	476			
	1522	12 39 "	490			
	1525	12 48 "	478			
	1528	12 57 "	485			
	1531	1 06 "	472			
	1534	2 30 "	438			
	1537	2 39 "	448			
	1540	2 48 "	434			
	1543	2 57 "	426			
	1546	3 06 "	431			
	1549	4 30 "	394			
	1552	4 39 "	406			
	1555	4 48 "	406			
	1558	4 57 "	398			
	1561	5 06 "	389			
	1564	6 00 "	369			
	1567	6 08 "	378			
	1570	6 16 "	391			
	1573	6 24 "	384			
	1576	6 32 "	375			
			<u>375</u>	(20 samples)		
			2 = 44	4.24		
				263		

SURVEY DISPOSAL METHODS- Dilution
 NEW YORK HARBOR Dissolved Oxygen in 1911
 Average C.C. per Liter from Cross-Sections
 COMPUTED BY: *ELLH.*

THE
 NARROWS

FILE NO 205
 ACC NO 1H 394
 SHEET 3 of 10 Comp 3
 DATE Jun 12 1912

MADE IN CONNECTION WITH

Date of Collection Sept 20 1911 LW 6:1 AM HW 10:30 AM

	Sample No	Time	Oxygen C C per Liter	Average C C per Liter		
				Each Current Depth	All Depths	Both Current & All Depths
Flood Current see sheet 1					(43 samples) 4.57	
Ebb Current				(20 samples) 4.24		
Depth 1 Ft. see sheet 2						
Mid-depth	1520	12:32 PM	4.78			
	1523	12:41 "	4.96			
	1526	12:50 "	4.91			
	1529	12:59 "	4.93			
	1532	1:08 "	4.87			
	1535	2:32 "	4.51			
	1538	2:41 "	4.48			
	1541	2:50 "	4.34			
	1544	2:59 "	4.26			
	1547	3:08 "	4.31			
	1550	4:31 "	3.96			
	1553	4:41 "	4.06			
	1556	4:50 "	4.06			
	1559	4:59 "	3.98			
	1562	5:08 "	4.0			
	1565	6:02 "	3.83			
	1568	6:10 "	3.92			
	1571	6:18 "	4.06			
	1574	6:26 "	3.98			
	1577	6:34 "	3.89	(20 samples) 4.30		
Bottom	1521	12:34 "	4.78			
			Same as 2			
			Mid-depth	(20 samples) 4.30	(20 samples) 4.28	(20 samples) 4.42
	1578	6:36 "	3.89	5.77	5.60	

SUBJECT DISPOSAL METHODS Dilution

FILE NO 205

New York Harbor Dissolved Oxygen in 1911

UPPER BAY

AGE NO 1H373

Average % of Saturation - f

NEAR ROBBING REEF

SHEET 1 TOT IN COMP 2

COMPUTED BY E.A.H.

CHECKED BY

DATE Jan 9 1912

MADE IN COMPLIANCE WITH

Date of Collection Oct 16, 1911

LV/Gov I 9⁰⁰ AM HW 3⁰⁰ PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	All Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Ebb Current</u>						
<u>Depth 1 Ft.</u>	2038	9 20 AM	64 %			
	2041	9 33 "	64			
	2044	9 50 "	65			
	2047	11 20 "	65			
	2050	11 35 "	66	(sampled)		
	2053	11 50 "	66	65.0 %		
<u>Mid-depths</u>	2039	9 22 "	65			
	2042	9 37 "	68			
	2045	9 52 "	66			
	2048	11 12 "	65			
	2051	11 37 "	66	(sampled)		
	2054	11 52 "	66	66.0		
<u>Bottom</u>	2040	9 25 "	65			
			same as			
			Mid depth	(sampled)	(sampled)	
	2055	11 55 "	66	66.0	65.7 %	
<u>Flood Current see sheet 2</u>			2.90	P. 65		

SUBJECT: DISPOSAL METHOD: Dilution
 New York Harbor: Dissolved Oxygen in 1911 UPPER BAY
 Average % of Saturation - from Cross Sections NEAR ROBBINS REEF
 COMPILED BY: E.A.H. CHECKED BY: DATE: Jan 9 1912
 MADE IN CONNECTION WITH:

Date of Collection Oct 16, 1911

LW Gov I 9⁵⁵ AM HW 3⁰² PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	Both	Currents & All Depths
				Each Depth	All Depths	
Ebb Current, sheet 1					(1 sample)	
					65.7%	
Flood Current						
Depth 1 Ft	2056	1 30 PM	68%			
	2059	1 35 "	66			
	2062	1 50 "	70			
	2065	3 30 "	76			
	2068	3 35 "	75			
	2071	3 50 "	76			
	2074	5 10 "	77			
	2077	5 18 "	75	(9 samples)		
	2080	5 24 "	75		73.1%	
Mid-depth	2057	1 22 "	77			
	2060	1 37 "	73			
	2063	1 52 "	76			
	2066	3 22 "	77			
	2069	3 37 "	76			
	2072	3 52 "	77			
	2075	5 12 "	78			
	2078	5 20 "	79	(8 samples)		
	2081	5 28 "	77		76.7	
Bottom	2058	1 25 "	77			
	2082	5 30 "	77	Mid depth (9 samples)	(13 samples)	(45 samples)
				76.7	75.5	71.9

See 205
11153 for sketch showing locations where samples were taken
 E. 99 P. 66

APPROVED BY
COMMISSIONER
OF
HEALTH

SUBJECT DISPOSAL METHODS- Dilution
NEW YORK HARBOR Dissolved Oxygen in 1911

Average C.C. per Liter.

COMPUTED BY

Edw. H.

CHECKED BY

UPPER BAY

NEAR ROBBINS REEF

FILE NO 205

AGE NO 111411

SHEET 1 TOT. IN COMP. 2

DATE JAN 15 1912

MADE IN CONNECTION WITH

Date of Collection, Oct. 16 1911

LW Gav I 9⁰⁵ AM HW 3⁰⁰ PM.

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Ebb Current</u>						
<u>Depth 1 ft</u>	2038	9 20 AM	3.96			
	2041	9 35 "	3.98			
	2044	9 50 "	4.03			
	2047	11 20 "	4.10			
	2050	11 35 "	4.12	(6 samples)		
	2053	11 50 "	4.17	4.06		
<u>Mid-depth</u>	2039	9 22 "	3.96			
	2042	9 37 "	4.12			
	2045	9 52 "	4.03			
	2048	11 22 "	3.96			
	2051	11 37 "	3.98	(6 samples)		
	2054	11 52 "	4.03	4.01		
<u>Bottom</u>	2040	9 25 "	3.96			
			same as			
	2055	11 55 "	4.03	(6 samples)	(6 samples)	
			4.03	4.01	4.03	
<u>Flood Current, see sheet 2</u>			6.99	6.67		

ANALYST
 TITRATION
 OF
 O₂

SUBJECT: DISPOSAL METHODS- Dilution
 New York Harbor Dissolved Oxygen in 1911

UPPERBAY

FILE NO 20.5

ACC. NO. 11412

Average C.C. per Liter.

NEAR RUBBIN REEF

SHEET 2 TOT. IN GROUP 2

COMPUTED BY: ELLH.

CHECKED BY

DATE July 15 1912

WORK IN CONNECTION WITH

Date of Collection, Oct. 16, 1911LW 40v I. 9⁴⁵ AM HW 3⁴⁵ PM

	Sample No	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		
				Each Current		Both Currents All Depths
				Each Depth	All Depths	
<u>Ebb Current see sheet 1</u>					(8 samples)	
<u>Flood Current</u>					4.08	
<u>Depth 1 Ft</u>						
	2056	1.30 PM	4.24			
	2059	1.35 "	4.14			
	2062	1.50 "	4.31			
	2065	3.20 "	4.65			
	2068	3.35 "	4.55			
	2071	3.50 "	4.58			
	2074	5.10 "	4.65			
	2077	5.18 "	4.55	(9 samples)		
	2080	5.26 "	4.53	4.47		
<u>Mid-depth</u>						
	2057	1.32 "	4.65			
	2060	1.37 "	4.40			
	2063	1.52 "	4.58			
	2066	3.22 "	4.65			
	2069	3.37 "	4.55			
	2072	3.52 "	4.58			
	2075	5.12 "	4.65			
	2078	5.20 "	4.68	(9 samples)		
	2081	5.28 "	4.58	4.59		
<u>Bottom</u>						
	2058	1.25	4.65			
			Same as			
	2082	5.30	4.58	(9 samples) 4.59	(9 samples) 4.55	(48 samples) 4.29
				62.97	1.68	

SUBJECT: DISPOSAL METHODS: Diffusion
New York Harbor: Dissolved Oxygen in 1911

UPPER BAY

FILE NO 205
ACQ. NO 1M375

Average % of Saturation:

NEAR ROBBINS REEF

BEST VERY IN CASE

COMPUTED BY

CHECKED BY

DATE JUN 9 1912

MADE AT CONSUMPTION CITY

Date of Collection Oct 23 1911

HW Goo I 8³⁷ AM LW 8¹⁸ PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Current	Both Currents	Both Currents
				Each Depth	All Depths	All Depths
<u>Flood Current</u>						
<u>Depth 1 Ft</u>	2083	9:30 AM	75 %			
	2086	9:45 "	74 "			
	2089	10:00 "	77 "	(sampled)		
	2092	10:15 "	78 "	76.0 %		
<u>Mid depth</u>	2084	9:35 "	75			
	2087	9:47 "	76			
	2090	10:02 "	78	(sampled)		
	2093	10:17 "	80	77.2		
<u>Bottom</u>	2085	9:38 "	75			
	2088	9:50 "	77			
	2091	10:05 "	79	(sampled)	(sampled)	
	2094	10:20 "	82	77.8	77.0 %	
<u>Ebb Current</u>						
<u>Depth 1 Ft</u>	2098	12:30 PM	74			
	2101	12:45 "	67			
	2104	1:00 "	73			
	2107	1:15 "	74			
	2113	3:30 "	69			
	2116	3:45 "	69			
	2119	4:00 "	67	(sampled)		
	2122	4:15 "	66	68.6		
<u>Mid depth</u>	2099	12:32 "	66			
	2102	12:47 "	74			
	2105	1:02 "	73			
	2108	1:17 "	77			
	2114	3:35 "	69			
	2117	3:47 "	69			
	2120	4:02 "	67	(sampled)		
	2123	4:17 "	68	70.2		
<u>Bottom</u>	2100	12:35 "	66			
	same as			
<u>Mid depth</u>	2124	4:20 "	68	(sampled)	(sampled)	(sampled)
				70.2	69.7	73.2
				Ex 99	P 69	

SUBJECT: DISPOSAL METHODS: Dilution FILE NO. 20.6
New York Harbor: Dissolved Oxygen in NW. UPPER BAY AND NO. 1H413
Average C.C. per Liter. NEAR ROBBINS REEF SHEET NOT IN CASE
 COMPUTED BY G.M.H. CHECKED BY DATE Jan. 16 1912
 MADE IN CONNECTION WITH

Date of Collection. Oct. 23, 1911 HWGw. I. 8⁴⁷AM LW 3¹⁸PM

	Sample No.	Time	Oxygen. C.C. per Liter	Averages. C.C. per Liter		
				Each Current		Both Currents & All Depths
				Each Depth	All Depths	
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	2083	9.30AM	4.78			
	2086	9.45 "	4.72			
	2089	10.00 "	4.83	(4 samples)		
	2092	10.15 "	4.92	4.81		
<u>Mid-depth</u>	2084	9.35 "	4.63			
	2087	9.47 "	4.72			
	2090	10.02 "	4.83	(4 samples)		
	2093	10.17 "	4.92	4.78		
<u>Bottom</u>	2085	9.38 "	4.65			
	2088	9.50 "	4.72			
	2091	10.05 "	4.83	(4 samples)	(4 samples)	
	2094	10.20 "	4.92	4.78	4.79	
<u>Ebb Current</u>						
<u>Depth 1 ft.</u>	2098	12.30PM	4.10			
	2101	12.45 "	4.31			
	2104	1.00 "	4.48			
	2107	1.15 "	4.73			
	2110	3.30 "	4.81			
	2114	3.45 "	4.58			
	2118	4.00 "	4.40	(4 samples)		
	2122	4.15 "	4.44	4.46		
<u>Mid-depth</u>	2099	12.35 "	4.10			
	2102	12.47 "	4.58			
	2105	1.03 "	4.55			
	2108	1.17 "	4.78			
	2111	3.35 "	4.58			
	2117	3.47 "	4.14			
	2120	4.02 "	4.24	(4 samples)		
	2123	4.17 "	4.34	4.43		
<u>Bottom</u>	2100	12.38 "	4.40			
			None as			
	2124	4.20 "	4.34	(4 samples)	(4 samples)	(36 samples)
			Mid Depth	4.43	4.44	4.62
				Co 19	At 70	

SUBJECT: DISPOSAL METHOD Dilution
 New York Harbor Dissolved Oxygen in PH UPPER BAY
 Average % of Saturation NEAR ROBBINS REEF
 COMPUTED BY *Butt* CHECKED BY
 DATE Jan 10 1912

Date of Collection Oct 24 1911 MW Gov I 9⁰⁰ AM LW 3³⁰ PM

	Sample No	Time	% of Saturation	Averages Percent of Saturation		
				Percent of Saturation		Both Currents - All Depths
				Each Depth	All Depths	
Flood Current						
Depth 1 Ft.	2125	9:16 AM	72%			
	2131	10:00 "	75			
	2134	10:15 "	76	(4 samples)		
	2137	10:20 "	76	74.2%		
Mid depth	2129	9:48 "	69			
	2132	10:03 "	70			
	2135	10:18 "	72	(4 samples)		
	2138	10:33 "	75	72.5		
Bottom	2130	9:51 "	69			
	2133	10:05 "	70			
	2136	10:21 "	72	(4 samples)	(4 samples)	
	2139	10:36 "	79	72.5	73.1%	
Ebb Current						
Depth 1 Ft.	2143	12:45 PM	77			
	2146	1:00 "	78			
	2149	1:15 "	79			
	2152	1:30 "	84			
	2158	5:45 "	76			
	2161	4:00 "	78			
	2164	4:15 "	79	(8 samples)		
	2167	4:30 "	80	78.5		
Mid depth	2144	12:48 "	79			
	2147	1:00 "	80			
	2150	1:12 "	81			
	2156	1:43 "	83			
	2159	3:47 "	78			
	2162	4:02 "	79			
	2165	4:17 "	81	(8 samples)		
	2168	4:32 "	83	80.5		
Bottom	2145	12:51 "	79			
	2169	4:35 "	83	(8 samples)	(8 samples)	(16 samples)
			80.5	80.5	79.8	76%

60 77 77

BUREAU: District Attorney - District

Date Recd. 80.5

NEW YORK: American Fisheries Commission 10/11/11. UPPER BAY

Date Recd. 114.6

Average C.L. per Liter

None Running Eggs

Quantity 707 in Glass

Collected by E.A.H.

Continued by

Date 10/11/11 12-12

Date of Collection. Oct. 24 1911 NEW YORK 9:00 AM LA 2:00 PM.

	Sample No.	Time	Oxygen C.L. per Liter	Average C.L. per Liter		Remarks
				Each Current	Each	
				Depth	Depth	
<u>Flood Current</u>						
<u>Depth 1 ft.</u>	2135	9.02 AM	6.45			
	2137	10.00 -	6.75			
	2136	10.00 -	6.80	(1 sample)		
	2137	10.00 -	6.90	4.75		
<u>Mid-Depth</u>						
	2138	9.03 -	6.87			
	2139	10.00 -	6.90			
	2135	10.00 -	6.85	(1 sample)		
	2138	10.00 -	6.90	4.87		
<u>Bottom</u>						
	2139	9.51 -	6.80			
	2139	10.00 -	6.90			
	2136	10.00 -	6.80	(1 sample)	(1 sample)	
	2137	10.00 -	6.90	4.87	4.60	
<u>Ebb Current</u>						
<u>Depth 1 ft.</u>						
	2140	10.00 AM	6.90			
	2140	1.00 -	6.90			
	2140	1.05 -	6.11			
	2140	1.30 -	6.00			
	2158	3.45 -	6.00			
	2161	4.00 -	6.10			
	2164	4.15 -	6.05	(1 sample)		
	2167	4.30 -	6.00	6.10		
<u>Mid-Depth</u>						
	2168	10.00 -	6.90			
	2167	1.00 -	6.90			
	2158	1.15 -	6.01			
	2158	1.30 -	6.00			
	2159	3.47 -	6.00			
	2160	4.00 -	6.10			
	2165	4.17 -	6.00	(1 sample)		
	2160	4.30 -	6.00	6.10		
<u>Bottom</u>						
	2145	12.31 -	6.95			
	2147	4.35 -	6.00	6.10	6.10	6.90

RESEARCH - DISPOSAL METHODS - OCEANOGRAPHY

NEW YORK/INVESTIGATION OF DISPOSAL OF LARVAE OF

ANIMALS IN THE OCEAN FROM LONG ISLAND SOUND

CONDUCTED BY: G. A. H.

DATE: 1964

PLATE NO. 20.5

DATE: 1964

CHART: 1, 2, 3, 4, 5, 6, 7, 8, 9

DATE: JAN 3, 1965

DATE OF COLLECTION: Oct. 6, 1964. 11:00 AM 6:00 PM 10:15 AM 10:30 AM

	Sample No.	Time	% of Saturation	Averaging Percent of Saturation		
				Each Current		Both
				Each Depth	All Depths	Currents All Depths
<u>Fixed Current</u> <u>Depth 1 ft</u>	1868	8:00 AM	60%			
	1869	8:01 -	61			
	1870	8:02 AM	61			
	1871	8:03 -	60			
	1872	8:04 -	61			
	1873	8:05 -	60			
	1874	8:06 -	61			
	1875	8:07 -	60			
	1876	8:08 -	61			
	1877	8:09 -	60			
	1878	8:10 -	61			
	1879	8:11 -	60			
<u>Mid depth and</u> <u>Bottom</u>	1880	8:12 AM	60			
	1881	8:13 -	61			
	1882	8:14 -	60			
	1883	8:15 AM	61			
	1884	8:16 -	60			
	1885	8:17 -	61			
	1886	8:18 -	60			
	1887	8:19 -	61			
	1888	8:20 -	60			
	1889	8:21 -	61			
	1890	8:22 -	60			
	1891	8:23 -	61			
<u>6.00 Current 901 AM 9</u>	1892	8:24 -	60			
	1893	8:25 -	61			

Disposal Method: Dilution
 New York Harbor (Classified Deep in 1911) LOWER END OF
 Average % of Saturation from Cross Section: NEWARK BAY
 SAMPLED BY: G.H. DATE: Jan. 8, 1911
 ANALYZED BY: DATE:

Date of Collection: Oct 6, 1911 H.M. 10:15 AM L.M. 10:45 PM H.W. 6:15 PM

	Sample No.	Time	% of Saturation	AVERAGED PERCENT of SATURATION		
				Each Depth	All Depths	Both Currents - All Depths
Ebb Current Length 1.17	1835	8:40 AM	62%			
	1835	8:40 -	61			
	1837	8:45 -	62			
	1839	8:50 -	71			
	1841	8:55 -	68			
	1844	9:10 -	66			
	1846	9:20 -	65			
	1848	9:35 -	64			
	1850	9:50 AM	66			
	1852	10:00 AM	68			
	1855	10:12 -	70			
	1857	10:18 -	71			
	1859	10:24 -	71			
	1861	10:30 -	70			
	1863	10:40 -	69			
	1866	11:12 -	65			
	1868	11:18 -	64			
	1870	11:24 -	66			
				66.4%		
Mid depth and Bottom	see sheet 3					

DISPOSAL METHODS Division

New York Harbor Dissolved Oxygen in 1961

Lower End of

20-5
11366

Avg. % of Saturation from Cross Sections

NEWARK BAY

3 3

Collected by GERI

CORRECTOR

Date Jan 8 1961

Date of Collection Oct 6, 1961

HW 6:01 AM LW 12:00 PM HW 6:00 PM

	Sample No.	Time	% of Saturation	Averages Percent of Saturation		
				Each Depth		Both
				Depth	All Depths	Currents All Depths
Flood Current (see sheet 1)					60.6%	
Ebb Current						
Depth (see sheet 2)					66.4%	
Mid depth and Bottom	1834	8:01 AM	65%			
	1836	8:12 -	61			
	1838	8:18 -	63			
	1840	10:01 -	71			
	1842	10:06 -	71			
	1843	10:10 -	68			
	1846	10:14 -	67			
	1847	10:13 -	64			
	1848	10:18 -	64			
	1851	12:01 PM	60			
	1853	12:06 -	60			
	1854	12:08 -	60			
	1856	12:14 -	73			
	1858	12:20 -	69			
	1859	12:24 -	71			
	1861	2:03 -	70			
	1864	2:06 -	67			
	1865	2:08 -	67			
	1867	2:14 -	69			
	1869	2:50 -	64	(Standard)	(Standard)	(see sample)
	1871	2:50 -	64	67.2	66.8	64.1%
					6.09	7.12

SUBJECT: DIFFUSAL METHOD - DILUTION
NEW YORK HARBOR DISSOLVED OXYGEN IN 1911 LOWER END OF
Average C.C. per Liter - from 1000 Section NEWARK BAY
 COMPUTED BY: 624 CHECKED BY:

FILE NO. 20.5
 ACC NO. 1H 402
 SHEET 1 TOT. IN COMP. 3
 DATE JAN. 13. 1912.

Date of Collection Oct. 6, 1911
HW 6:41 I 6:30 PM LW 12:40 PM HW 6:35 PM

	Sample No.	Time	Oxygen C.C. per Liter	Averages C.C. per Liter		Both Currents All Depths
				Each Current		
				Each Depth	All Depths	
Flood Current						
Depth 1 Ft.						
	1878	8:00 AM	3.88			
	1880	8:06 "	3.84			
	1872	8:30 PM	3.88			
	1874	8:36 "	3.84			
	1877	8:44 "	3.89			
	1879	8:50 "	3.88			
	1881	8:56 "	3.92			
	1883	9:02 "	3.88			
	1885	9:06 "	3.72			
	1888	9:14 "	3.61			
	1890	9:20 "	3.55			
	1892	9:26 "	3.65	(13 Samples)		
				3.79		
Mid-depth and Bottom						
	1829	8:02 AM	3.88			
	1831	8:08 "	4.12			
	1832	8:10 "	3.70			
	1873	8:32 PM	3.86			
	1875	8:38 "	3.84			
	1876	8:40 "	4.12			
	1878	8:46 "	3.89			
	1880	8:52 "	3.83			
	1882	8:58 "	3.92			
	1884	9:02 "	3.88			
	1886	9:08 "	3.84			
	1887	9:10 "	3.98			
	1889	9:16 "	3.61			
	1891	9:22 "	3.55	(15 Samples)	(17 Samples)	
	1893	9:26 "	3.64	3.85	3.82	
				6.94	7.76	

SUBJECT DISPOSAL METHODS - DILUTION
 NEW YORK HARBOR DISSOLVED OXYGEN IN 1911 LOWER END OF
 AVERAGE C.C. PER LITER FROM CROSS-SECTIONS NEWARK BAY
 COMPUTED BY GM CHECKED BY _____
 FILE NO. 28.5 AGE NO. 1H403
 SHEET 2 TOT. IN COPY 3 DATE JAN. 13 1922

DATE OF COLLECTION, OCT. 6, 1911 H.M. 6:24 A.M. L.W. 12:45 P.M. H.M. 6:15 P.M.

	SAMPLE No.	TIME	OXYGEN C.C. PER LITER	AVERAGES C.C. PER LITER		
				EACH CURRENT		BOTH CURRENTS
				EACH DEPTH	ALL DEPTHS	
Ebb Current DEPTH 1 FT.	1833	8.14 A.M.	3.69			
	1835	8.20 "	3.89			
	1837	8.26 "	3.92			
	1839	8.32 "	4.46			
	1841	8.38 "	4.26			
	1843	8.44 "	4.17			
	1845	8.50 "	4.10			
	1847	8.56 "	4.06			
	1850	9.02 P.M.	4.18			
	1852	9.08 P.M.	4.26			
	1855	9.14 "	4.44			
	1857	9.20 "	4.51			
	1859	9.26 "	4.48			
	1861	9.32 "	4.48			
	1863	9.38 "	4.26			
	1866	9.44 "	4.17			
	1868	9.50 "	4.10			
	1870	9.56 "	4.20			
Mid-Depth & Bottom	SEE SHEET 3			18 Sample 4.31		
				Ex 74	~ 77.	

2 REPLICATIONS
NO. 1001-100
NO. 1002-1000
NO. 1003-1000

SUBJECT: Disposal Methods Dilution
NEW YORK HARBOR Dissolved Oxygen in 1911 LOWER END OF
Average C.C. per liter - from cross section NEWARK BAY
COMPILED BY Chitt. CHECKED BY

FILE NO. 20 S
ACC NO. 1H404
SHEET 3 TOT. IN COMP. 3
DATE Jan. 15 1912

MADE IN CONNECTION WITH

Date of Collection, Oct. 6, 1911

HW 6:51 AM. LW 12:45 PM. HW 6:55 PM.

	Sample No.	Time	Oxygen C.C. per Liter	Averages C.C. per liter		
				Each Current		Both
				Each Deep	All Depths	Currents - All Depths
<u>Flood Current. see sheet 1.</u>					(27 samples) 3.82	
<u>Ebb Current</u>						
<u>Depth 1 Ft. see sheet 2</u>				(18 samples) 4.21		
<u>Mid-depth and Bottom</u>						
	1834	8:16 AM.	3.83			
	1836	8:22 "	3.89			
	1838	8:28 "	3.97			
	1840	10.02 "	4.40			
	1842	10.08 "	4.40			
	1843	10.10 "	4.26			
	1845	10.18 "	4.17			
	1847	10.22 "	4.10			
	1849	10.28 "	4.06			
	1851	12.02 PM	4.32			
	1852	12.06 "	4.26			
	1854	12.08 "	4.26			
	1856	12.14 "	4.58			
	1858	12.20 "	4.58			
	1860	12.26 "	4.48			
	1862	2.02 "	4.26			
	1864	2.06 "	4.26			
	1865	2.08 "	4.26			
	1867	2.14 "	4.17			
	1869	2.20 "	4.20	(21 samples)	(20 samples)	(16 samples)
	1871	2.26 "	<u>4.20</u>	<u>4.25</u>	<u>4.22</u>	<u>4.02</u>
				4.25	4.22	4.02

THE PEOPLE OF THE STATE OF NEW YORK,
COMPLAINANTS,

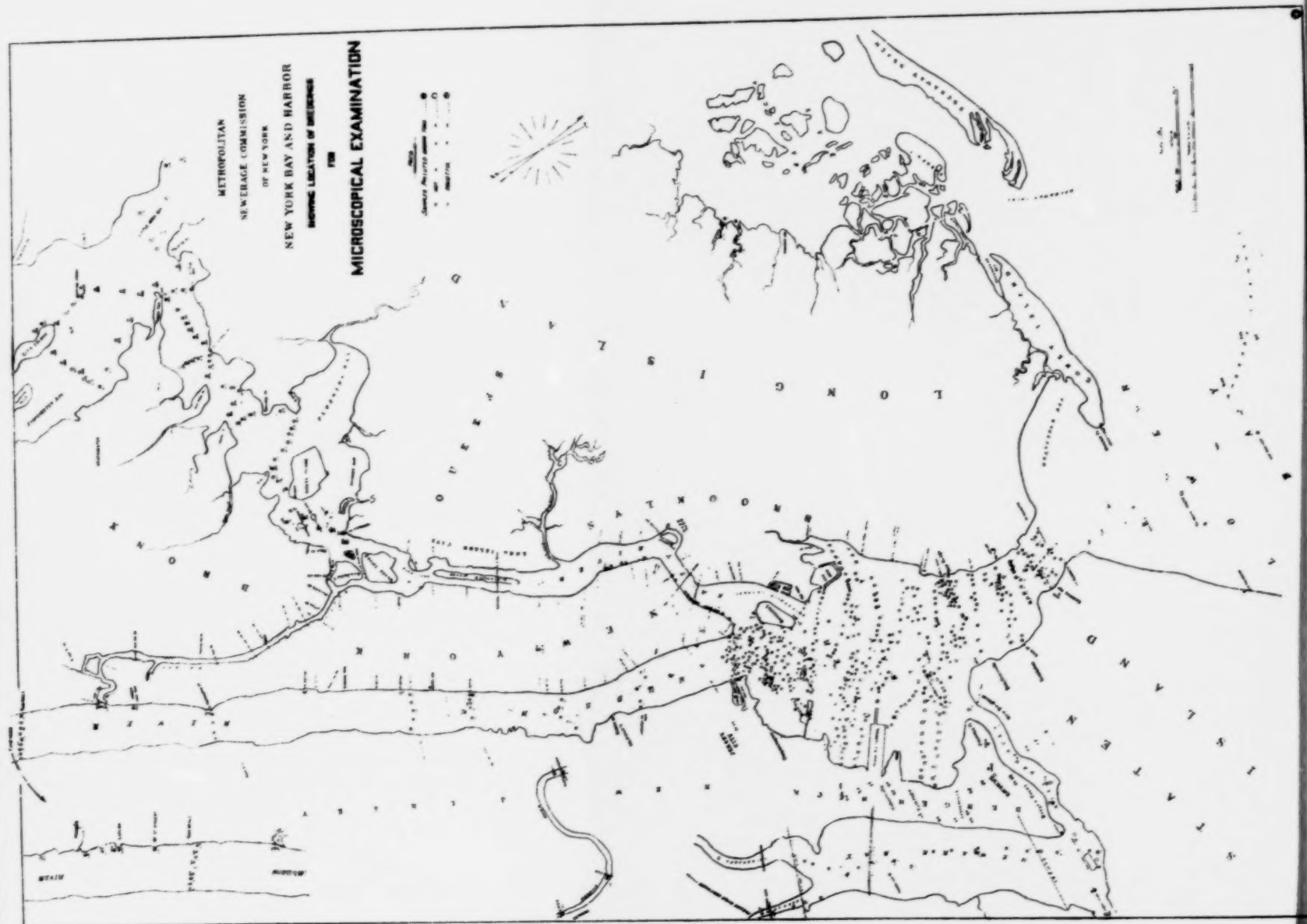
VS.

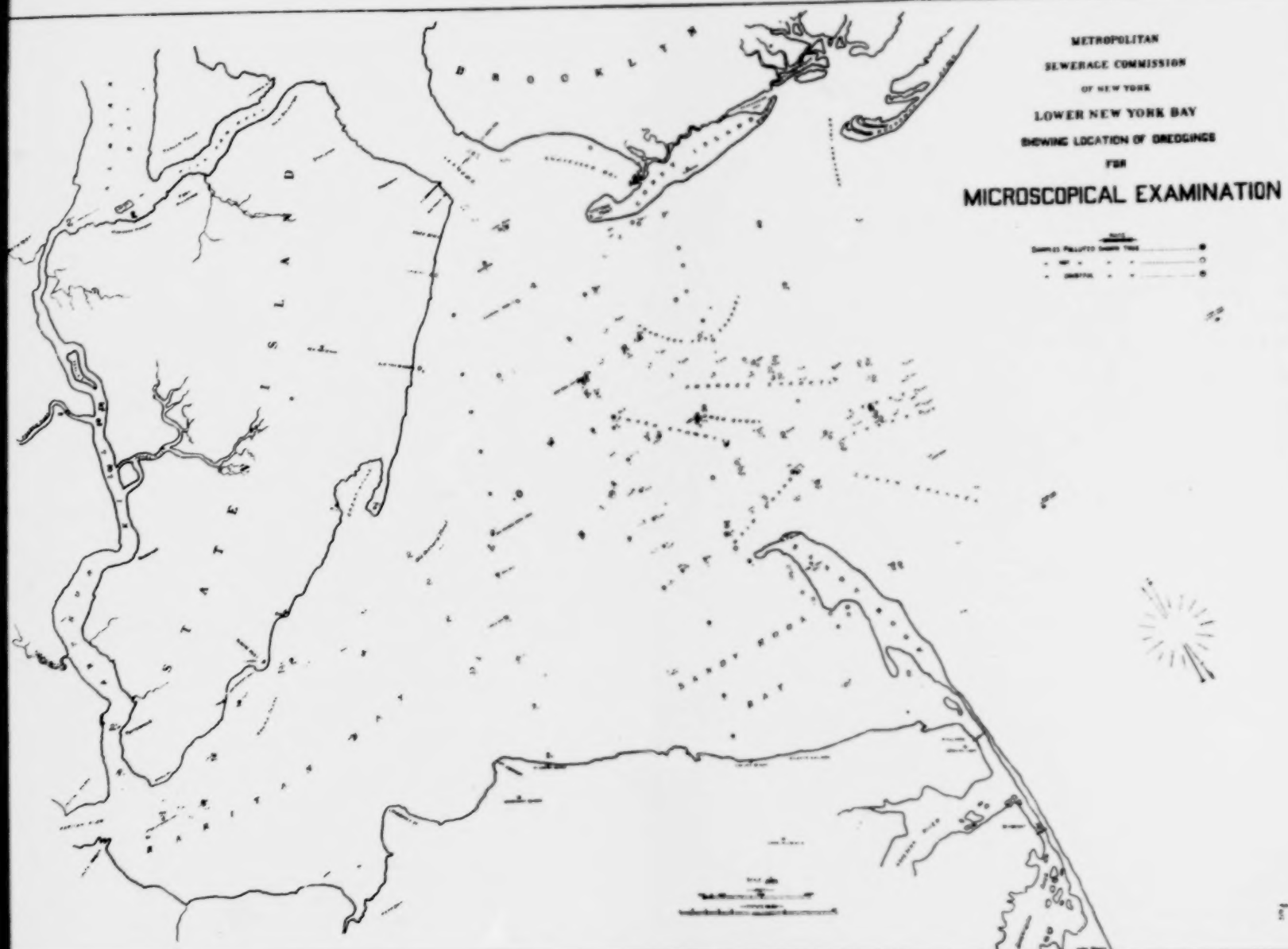
STATE OF NEW JERSEY ET AL.

HERE FOLLOW COMPLAINANTS' EXHIBITS

Nos. 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113,
114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124.

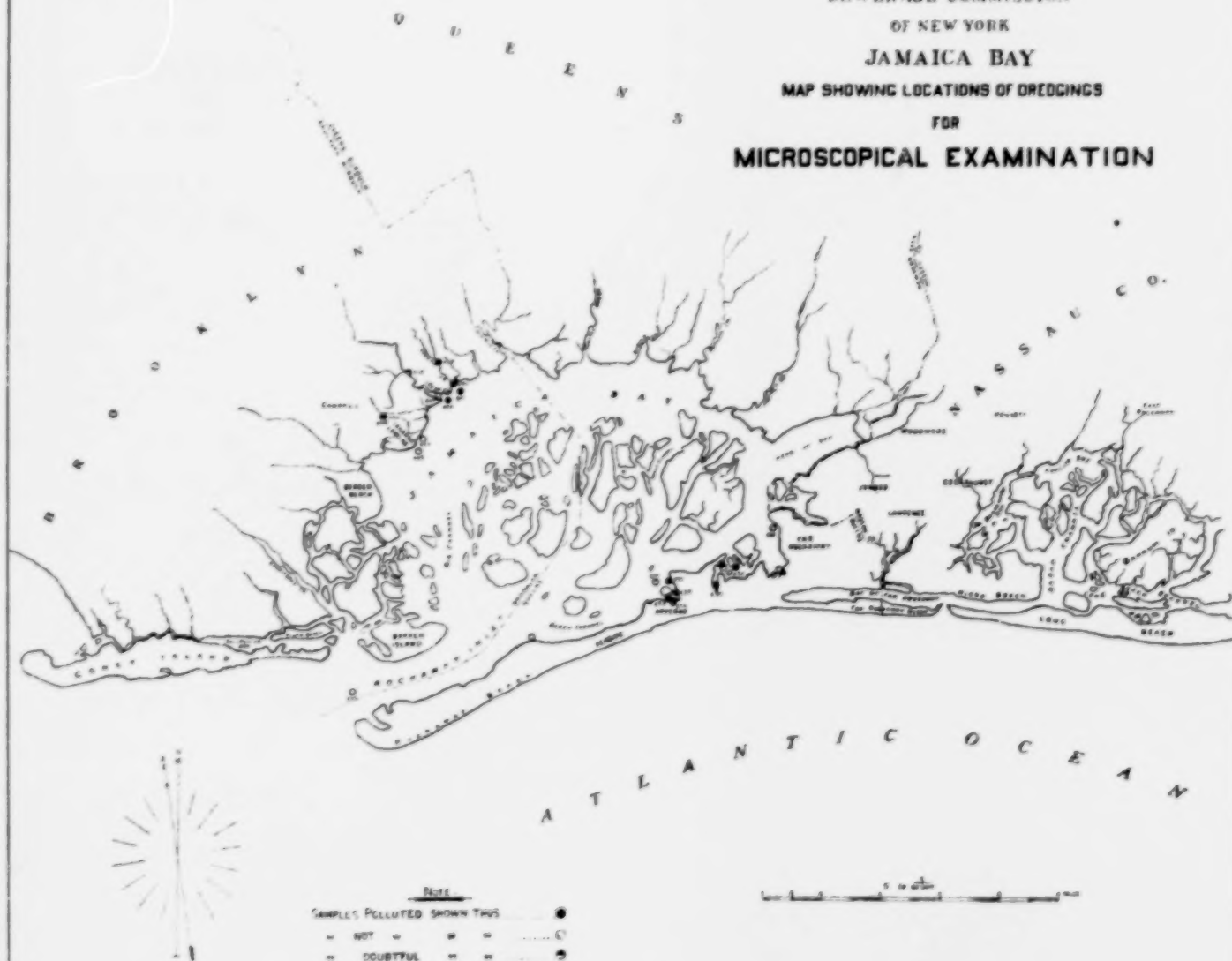
JAMES D. MAHER,
Commissioner.





Complainant's Exhibit No. 101
James A. Maher.

METROPOLITAN
SEWERAGE COMMISSION
OF NEW YORK
JAMAICA BAY
MAP SHOWING LOCATIONS OF DREDGINGS
FOR
MICROSCOPICAL EXAMINATION



OXYGEN

1911

- 1835 SAMPLES -

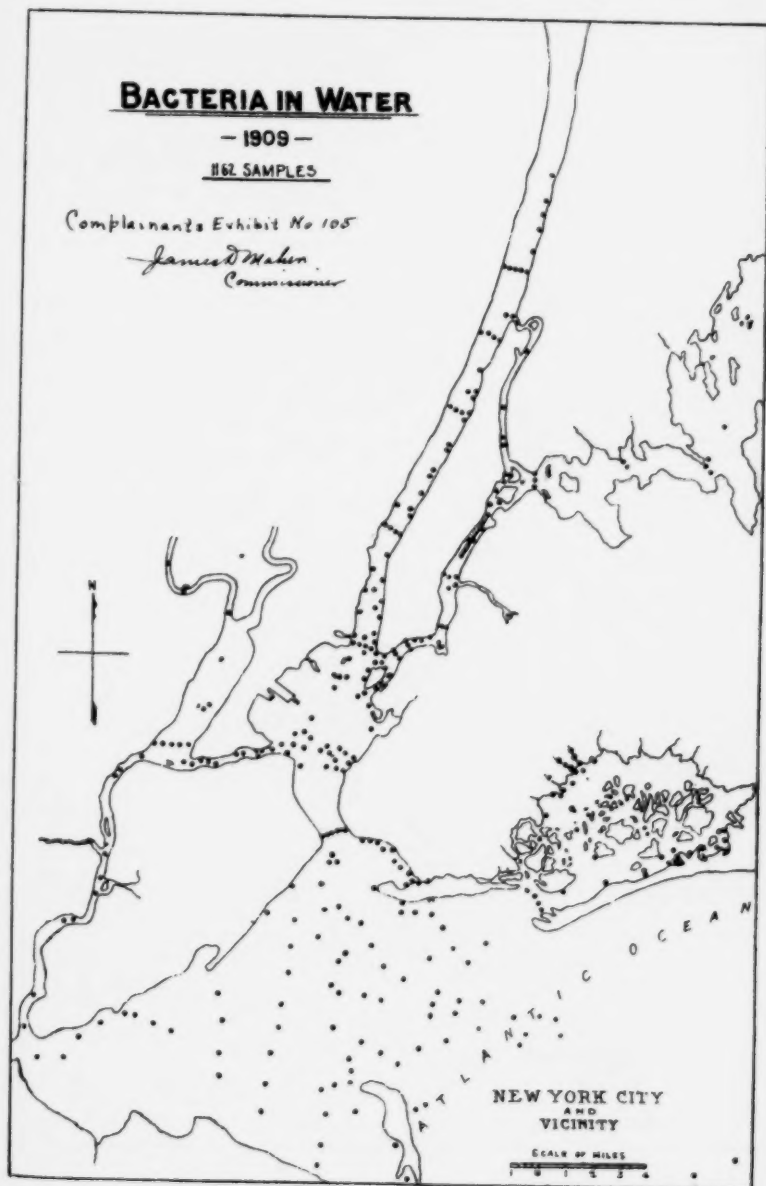
Complainants Exhibit No 103

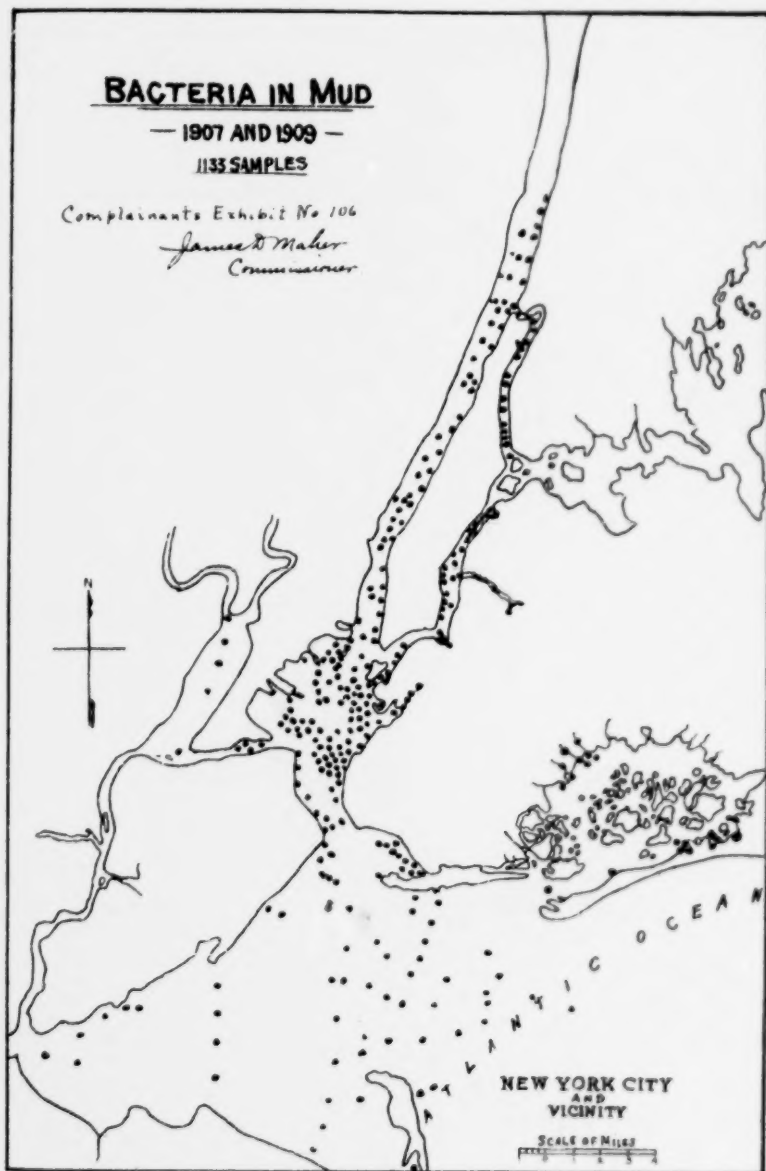
James B. Mahon

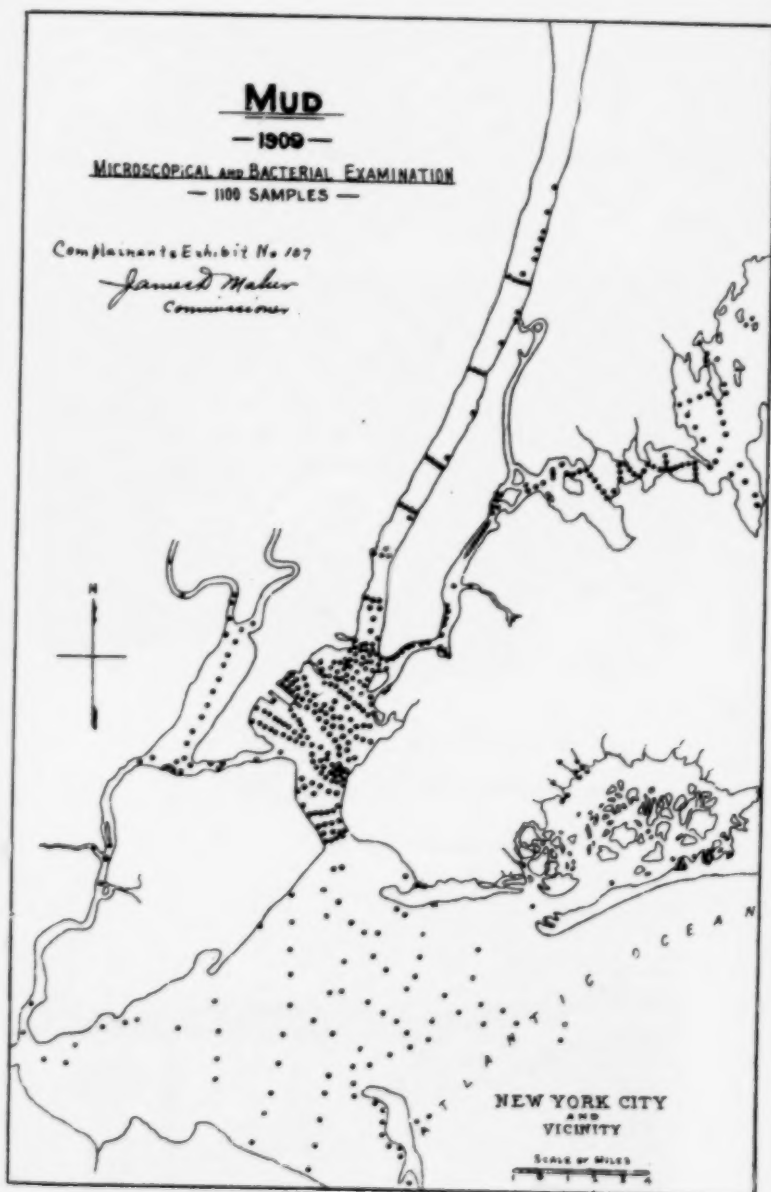
Chemical Engineer











Then Oct. 7, 1909. Boat in Jamaica Bay from 20th ward house,
 Second East. Boat started from Fresh Creek to Old Mill
 Creek. Hauled. Taken at 1:25 p.m.
 "1.25 Photograph taken only taken looking N.E. South and
 breaking up composition of film 10



Compliments Ex libit No. 108 O'Mahony Commission

Compliments Ex libit No. 109
 James O'Mahony
 Commission



Compliments Ex libit No.

Complaints Exhibit No. 110
James D. Maher,
Commissioner

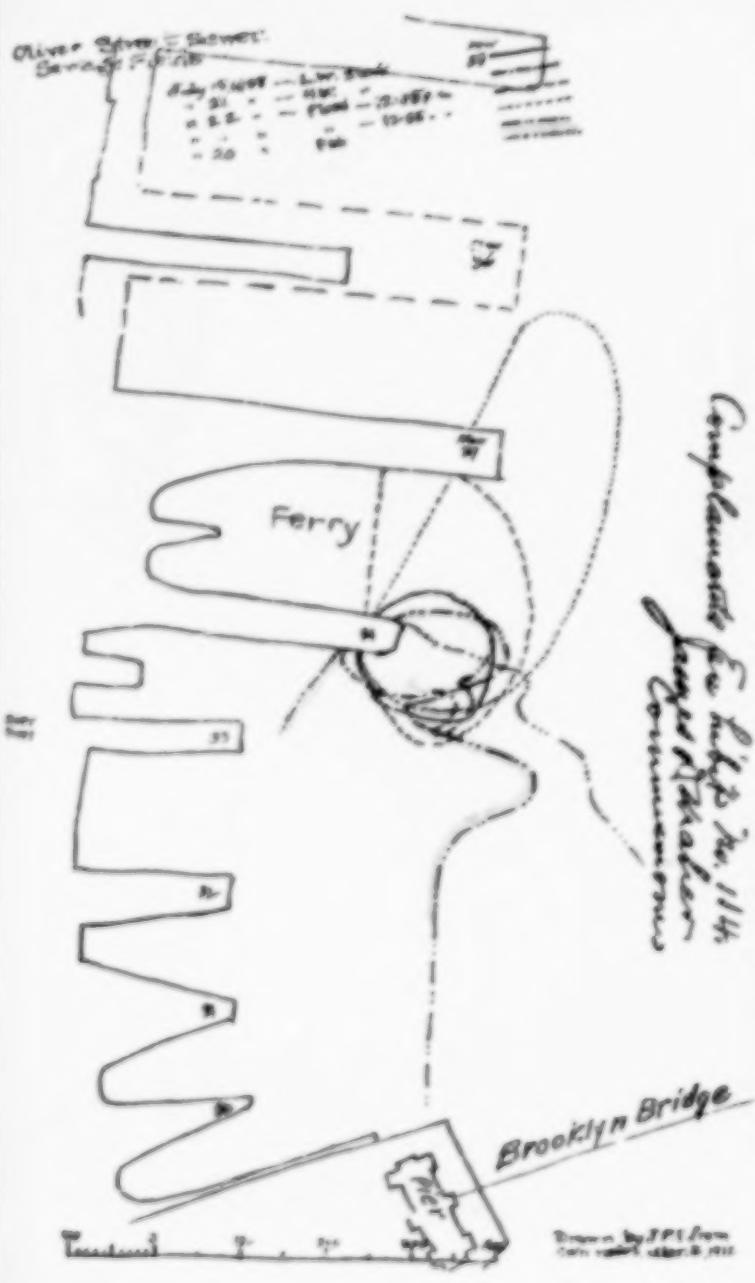


Complaints Exhibit No. 111
James D. Maher,
Commissioner



Oliver Street Sewer
Sewage P. 10

July 1908	Low Bank	12-1882
" 21 "	" "	" "
" 22 "	" "	" "
" 23 "	" "	" "
" 24 "	" "	" "
" 25 "	" "	" "
" 26 "	" "	" "
" 27 "	" "	" "
" 28 "	" "	" "
" 29 "	" "	" "
" 30 "	" "	" "



Complaint to the
Mayor of New York
City

Brooklyn Bridge

Drawn by J.P. from
Sewer map, dated 6/1911



Little

James River

Compliments Exhibit No. 115
James River
Commissioners.

Scale
1/2 1/4 3/8 1/2 3/4 1 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2 3 3 1/4 3 1/2 4 4 1/4 4 1/2 5 5 1/4 5 1/2 6 6 1/4 6 1/2 7 7 1/4 7 1/2 8 8 1/4 8 1/2 9 9 1/4 9 1/2 10 10 1/4 10 1/2 11 11 1/4 11 1/2 12 12 1/4 12 1/2 13 13 1/4 13 1/2 14 14 1/4 14 1/2 15 15 1/4 15 1/2 16 16 1/4 16 1/2 17 17 1/4 17 1/2 18 18 1/4 18 1/2 19 19 1/4 19 1/2 20 20 1/4 20 1/2 21 21 1/4 21 1/2 22 22 1/4 22 1/2 23 23 1/4 23 1/2 24 24 1/4 24 1/2 25 25 1/4 25 1/2 26 26 1/4 26 1/2 27 27 1/4 27 1/2 28 28 1/4 28 1/2 29 29 1/4 29 1/2 30 30 1/4 30 1/2 31 31 1/4 31 1/2 32 32 1/4 32 1/2 33 33 1/4 33 1/2 34 34 1/4 34 1/2 35 35 1/4 35 1/2 36 36 1/4 36 1/2 37 37 1/4 37 1/2 38 38 1/4 38 1/2 39 39 1/4 39 1/2 40 40 1/4 40 1/2 41 41 1/4 41 1/2 42 42 1/4 42 1/2 43 43 1/4 43 1/2 44 44 1/4 44 1/2 45 45 1/4 45 1/2 46 46 1/4 46 1/2 47 47 1/4 47 1/2 48 48 1/4 48 1/2 49 49 1/4 49 1/2 50 50 1/4 50 1/2 51 51 1/4 51 1/2 52 52 1/4 52 1/2 53 53 1/4 53 1/2 54 54 1/4 54 1/2 55 55 1/4 55 1/2 56 56 1/4 56 1/2 57 57 1/4 57 1/2 58 58 1/4 58 1/2 59 59 1/4 59 1/2 60 60 1/4 60 1/2 61 61 1/4 61 1/2 62 62 1/4 62 1/2 63 63 1/4 63 1/2 64 64 1/4 64 1/2 65 65 1/4 65 1/2 66 66 1/4 66 1/2 67 67 1/4 67 1/2 68 68 1/4 68 1/2 69 69 1/4 69 1/2 70 70 1/4 70 1/2 71 71 1/4 71 1/2 72 72 1/4 72 1/2 73 73 1/4 73 1/2 74 74 1/4 74 1/2 75 75 1/4 75 1/2 76 76 1/4 76 1/2 77 77 1/4 77 1/2 78 78 1/4 78 1/2 79 79 1/4 79 1/2 80 80 1/4 80 1/2 81 81 1/4 81 1/2 82 82 1/4 82 1/2 83 83 1/4 83 1/2 84 84 1/4 84 1/2 85 85 1/4 85 1/2 86 86 1/4 86 1/2 87 87 1/4 87 1/2 88 88 1/4 88 1/2 89 89 1/4 89 1/2 90 90 1/4 90 1/2 91 91 1/4 91 1/2 92 92 1/4 92 1/2 93 93 1/4 93 1/2 94 94 1/4 94 1/2 95 95 1/4 95 1/2 96 96 1/4 96 1/2 97 97 1/4 97 1/2 98 98 1/4 98 1/2 99 99 1/4 99 1/2 100 100 1/4 100 1/2 101 101 1/4 101 1/2 102 102 1/4 102 1/2 103 103 1/4 103 1/2 104 104 1/4 104 1/2 105 105 1/4 105 1/2 106 106 1/4 106 1/2 107 107 1/4 107 1/2 108 108 1/4 108 1/2 109 109 1/4 109 1/2 110 110 1/4 110 1/2 111 111 1/4 111 1/2 112 112 1/4 112 1/2 113 113 1/4 113 1/2 114 114 1/4 114 1/2 115 115 1/4 115 1/2 116 116 1/4 116 1/2 117 117 1/4 117 1/2 118 118 1/4 118 1/2 119 119 1/4 119 1/2 120 120 1/4 120 1/2 121 121 1/4 121 1/2 122 122 1/4 122 1/2 123 123 1/4 123 1/2 124 124 1/4 124 1/2 125 125 1/4 125 1/2 126 126 1/4 126 1/2 127 127 1/4 127 1/2 128 128 1/4 128 1/2 129 129 1/4 129 1/2 130 130 1/4 130 1/2 131 131 1/4 131 1/2 132 132 1/4 132 1/2 133 133 1/4 133 1/2 134 134 1/4 134 1/2 135 135 1/4 135 1/2 136 136 1/4 136 1/2 137 137 1/4 137 1/2 138 138 1/4 138 1/2 139 139 1/4 139 1/2 140 140 1/4 140 1/2 141 141 1/4 141 1/2 142 142 1/4 142 1/2 143 143 1/4 143 1/2 144 144 1/4 144 1/2 145 145 1/4 145 1/2 146 146 1/4 146 1/2 147 147 1/4 147 1/2 148 148 1/4 148 1/2 149 149 1/4 149 1/2 150 150 1/4 150 1/2 151 151 1/4 151 1/2 152 152 1/4 152 1/2 153 153 1/4 153 1/2 154 154 1/4 154 1/2 155 155 1/4 155 1/2 156 156 1/4 156 1/2 157 157 1/4 157 1/2 158 158 1/4 158 1/2 159 159 1/4 159 1/2 160 160 1/4 160 1/2 161 161 1/4 161 1/2 162 162 1/4 162 1/2 163 163 1/4 163 1/2 164 164 1/4 164 1/2 165 165 1/4 165 1/2 166 166 1/4 166 1/2 167 167 1/4 167 1/2 168 168 1/4 168 1/2 169 169 1/4 169 1/2 170 170 1/4 170 1/2 171 171 1/4 171 1/2 172 172 1/4 172 1/2 173 173 1/4 173 1/2 174 174 1/4 174 1/2 175 175 1/4 175 1/2 176 176 1/4 176 1/2 177 177 1/4 177 1/2 178 178 1/4 178 1/2 179 179 1/4 179 1/2 180 180 1/4 180 1/2 181 181 1/4 181 1/2 182 182 1/4 182 1/2 183 183 1/4 183 1/2 184 184 1/4 184 1/2 185 185 1/4 185 1/2 186 186 1/4 186 1/2 187 187 1/4 187 1/2 188 188 1/4 188 1/2 189 189 1/4 189 1/2 190 190 1/4 190 1/2 191 191 1/4 191 1/2 192 192 1/4 192 1/2 193 193 1/4 193 1/2 194 194 1/4 194 1/2 195 195 1/4 195 1/2 196 196 1/4 196 1/2 197 197 1/4 197 1/2 198 198 1/4 198 1/2 199 199 1/4 199 1/2 200 200 1/4 200 1/2 201 201 1/4 201 1/2 202 202 1/4 202 1/2 203 203 1/4 203 1/2 204 204 1/4 204 1/2 205 205 1/4 205 1/2 206 206 1/4 206 1/2 207 207 1/4 207 1/2 208 208 1/4 208 1/2 209 209 1/4 209 1/2 210 210 1/4 210 1/2 211 211 1/4 211 1/2 212 212 1/4 212 1/2 213 213 1/4 213 1/2 214 214 1/4 214 1/2 215 215 1/4 215 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Complacants Exhibit No. 116
James D. Maher,
Commissioner.



Complacants Exhibit No. 117
James D. Maher,
Commissioner.



Complaints Exhibit No. 118
James D. Maher
Commissioner



Complaints Exhibit No. 119
James D. Maher,
Commissioner.



Complainant Exhibit No. 120
James D. Maher
Commissioner



Complainant Exhibit No. 121,
James D. Maher
Commissioner



Compliments Exhibit No. 122.
James D. Maher
Commissioner.



THE PEOPLE OF THE STATE OF NEW YORK,
COMPLAINANTS,

VS.

STATE OF NEW JERSEY ET AL.

COMPLAINANTS' EXHIBIT No. 123.

Showing the Plan of the Harbor and Land Commission of 1895.

JAMES D. MAHER,
Commissioner.